DOCTORAL THESIS

Multisensorial learning in the professional ballet class in three London institutions

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MULTISENSORIAL LEARNING OF PROFESSIONAL BALLET DANCERS IN THE DAILY CLASS IN THREE LONDON INSTITUTIONS

by

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Abstract

This thesis investigates how the professional ballet dancers engage with multiple senses in ballet class, as a cultural space which impact the formation of their sensoria and can promote more inclusive and democratic learning. The daily class is one of the core practices in the professional ballet dancers' career. Dancers embody unique aesthetic and physicality depending on the setting of each class, its institutional policies, and their social relations in the cultural environment.

I draw on the literature of dance studies, anthropology of the senses, and sociology to explore the ballet dancers' ways of learning with their senses in class, as well as on my personal twenty-seven-year experience as a professional dancer, and later as a ballet teacher. The methodology involved ethnographic observations of classes, participatory fieldwork of classes and interviews with dancers.

The central premise underpinning this research is that dancers engage with affective ways of knowing to learn in ballet class which differ forming their shifting sensoria. Dancers prioritise some sensorial modalities in class impacting the way they learn about technique, and about their own bodies in relation to the performance as a display of individuality and artistry. Dancers attend with their senses, think, and feel through focused attention, memory, imagery, and emotions. Based on the concepts of sensorium, *corazonar*, decolonisation and democratisation I argue that knowledges from the epistemologies of the South focused on deep sensing contribute to the dancer's multisensorial learning of ballet.

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Introduction

This study proposes a new look at the professional ballet dancer's sensorial engagement in the daily ballet class. Focusing on the ballet dancer's multisensorial learning in ballet class in three institutions in London, this research explores ways in which senses contribute to this process. In this investigation sensing is understood as a set of dynamic interactions between bodily senses and sensations associated with the dancers' learning. Ways of sensing are means through which professional ballet dancers understand the world associated with their physicality, emotions, social relations, and cognition. To study the use of the senses means to comprehend which senses are used and how they impact on the dancers' learning in ballet class. For this reason, I argue that the professional ballet dancers' engagement with their senses can promote a new way of learning in the ballet class. This form of learning is multisensorial and culturally framed constituting the dancers' sensoria.

As one of the principal centres of ballet in the twenty-first century, London hosts a variety of major international and national ballet institutions, including companies, dance schools, and studios that attract many dancers and teachers. Many companies, including The Royal Ballet, English National Ballet, and Ballet Black employ professional ballet dancers and international guest artists. Due to the abundance of professional ballet classes, London is a fitting place to investigate the dancer's sensorial experience. In this study, various types of ballet classes are viewed as institutionally - constituted spaces with certain distinctive cultural characteristics. The focus on three London ballet institutions - two ballet companies, the English National Ballet (ENB) and Ballet Black (BB), and one independent studio DanceWorks (DW), provides a representative sample for this ballet-cultural local variety. When class settings are investigated as discrete ballet cultural spaces, it becomes evident that the learning of ballet technique also involves socialisation and the learning of particular values and beliefs. My study focuses on the role of the bodily senses in this setting, as it is evident in daily ballet classes.

The selection of three institutions in this study exemplify the cultural and institutional

variety of these London institutions. I will discuss below how these ballet classes differ in size, hierarchical structures, and the diverse backgrounds of the dancers. Although the scope of this study is limited to three institutions, these companies well represent the London ballet scene in the early decades of the twenty-first century. Furthermore, the dancers in this study have expert knowledge of their bodies and think about their practice reflectively. They are coached by equally expert teachers, who propose and adapt movements and dynamics as necessary, to attend to the professional dancers' needs.

The study is conducted taking into consideration simultaneous processes in the professional ballet class related to the dancer's learning. With respect to ballet teaching, democratic pedagogical strategies in the ballet class environment, with a focus on a student-centred approach, have already been considered by dance scholars Gretchen Alterowitz (2014) and Cadence Joy Whittier (2008; 2018). However, these scholars did not investigate the role of sensorial involvement in the democratisation of the dancer's learning in the class. Furthermore, whilst these studies focus on the development of pedagogic approaches, my study brings new insights by focusing predominantly on the dancers' perspective of learning. By observing the dancers in the class, and speaking with them, my analysis reveals how professional ballet performers deploy senses to learn about ballet technique. This is not to say that the dancers learn with their senses in class only through their engagement with the teacher. The professional ballet dancers learn through their senses in a ballet class in their relations with other people (the teachers, their peers, the pianist), and the specificities of the class space. This includes the size of the studio or stage, floors, mirrors, barre, air and room temperature, lighting (daylight or artificial) and musical equipment (piano or electronic). All of these elements impact their learning.

My study also recognises that there are social and cultural aspects in the ballet class which impact the way dancers sense and learn. Professional ballet dancers use their senses in such a way, depending on the context of each class which promote a particular prioritisation of their senses. When considering these complex experiences of dancers' ways of sensing,

senses and sensations should also be given the potential to be recognised, used and valued when investigating the dancers' learning. During this process of learning, it will be argued, that the senses impact upon the dancer's understanding of their individual embodied processes and the relationship with their body image, which in turn have an impact on the complex set of social and interpersonal relations in the class. In this respect, the ballet class functions as a cultural and socially constituted space, and the senses play a significant role in this process.

Background and genesis of this research

The origin of this study stems from the many reflections I have had over my 27-year career as a professional ballet dancer, and later as a teacher in a university setting. To carry out the investigation, I moved to London for four years to research and engage with professional ballet dancers. In addition to observing ballet classes and interviewing ballet dancers, I participated in a variety of classes as social and cultural spaces. As a dancer, I felt closer to an insider position, with personal experience of different ballet classes and familiarity with characteristics of a 'ballet world' culture. However, as the selected three sites were new social and institutional environments to me, I was also aware of my perspective and position as a cultural outsider.

In this study, I faced the challenge to explore and bring solutions to practical problems related to the use of the dancer's senses in learning in class. I came to London with this knowledge about ballet deeply embodied and embedded in my practice of performing, teaching, and studying this art form. My culturally different background led me to notice new details about ballet classes in London, and in general. Though, from the first participation at one of the institutions investigated in this research, I also noticed that certain elements in the ballet class felt familiar to me. This duality - the newness and familiarity of London ballet classes was intriguing: I wondered what other dancers were experiencing through their senses. As I wrote in my ethnographic diary:

When I arrived at the company venue to take the ballet class on that cold morning, the teacher, who is an old friend since we performed together in the U.S.A, greeted me with a hug. Whilst some dancers stretched on the floor of the studio with headphones and layers of clothes; other dancers were talking and socialising before class. I started to do my habitual warm up[1] as I felt my body slow and painful from the work in the previous day's class. The teacher welcomed everybody and started the class by marking the first exercise at the barre without music, yet counting the musicality desired for the movements to be performed. After he explained the combination, we all prepared at the barre to execute the sequence. I knew what to do as I have done these movements and steps for many years over my career. However, the teacher suggested some nuances new to me. He demonstrated and explained how to do the movement using different accents of the music focusing on the use of specific breathing patterns to help with dynamic, which led to particular ways of sensing. I experimented with my breathing associated with the musical accents which helped with the movement dynamics, reduced muscle pain and tension, and in addition, it made me feel lighter and more energetic. I felt different kinaesthetic sensations from this experience. The act of breathing with a particular purpose enhanced my confidence to move in class. I observed my movements in the mirror, and the dancers in that class and noticed those nuances resonating in their bodies (BB Class 2).

This excerpt shows how, as a professional ballet dancer, I felt simultaneously positioned as an insider and outsider. From personal experience of different international ballet classes, I had a certain familiarity with the characteristics of the broad ballet world, as a specific dance culture. I was familiar with how to use the barre and the mirrors, the dance floor was similar, and the French vocabulary of ballet steps was the same. The sound of the recorded piano music accompanying the exercises was well-known, as was the experience of being together

[1] Warm up refers to a body routine created individually or by the teacher to be executed collectively. Often the warm up combination gradually increases the dancers' temperature and flexibility preparing them for complex movements.

with other dancers in space and time. Additionally, I felt other familiar internal and external sensorial experiences. For anthropologist Kathryn Linn Geurts (2002:46), many Westerners distinguish between 'external senses (hearing, touch, taste, smell, sight) and internal senses (balance, kinaesthesia, proprioception) and then emotion (anger, happiness, sadness, disgust, surprise)'. I follow Geurts' sensory model, which includes monitoring internal and external states of the body as sources of information. For instance, I used my external senses of sight to observe the dancing bodies and hearing to listen to the teacher's guidance to apply different musical nuances to movement. I perceived other external sensations, such as the happy and energetic mood transmitted by the teacher through his corrections in class, and some internal sensations, such as sweating and the warm temperature of my body. Yet there were particular elements unique to that ballet class. My experience was also of an outsider; I was not the same as these dancers in London. I heard the new approach in the teacher's directions, and immediately felt a new way of sensing. The use of breathing and the music associated with particular parts of the sequences helped to apply dynamics to the movement and triggered an emotional state of confidence to move. In other words, that class was also a new and specific ballet space, where the teacher and dancers interacted in a specific way. I felt new internal sensations, from focusing on my breathing, kinaesthetic sense, and use of the music, which were unfamiliar. Moreover, I felt the presence of the director of the company, who came in briefly to check on the class, smiling at the dancers, and the cheerful mood when the dancers applauded each other in the centre exercises. Many of these sensorial perceptions in that class were also shaped by the specificity of the ballet culture in that particular institution, which promoted diverse ways of dancers' sensing. This is why each institution's ballet class in this study is considered as a specific cultural space, that promotes different sensorial qualities in dancers' ways of moving. I explore these cultural spaces as a ballet dancer and an insider, but also as an outsider in the specific class cultures.

I am aware that my involvement is also culturally shaped through my senses and by my experience of them. As a South American researcher, I bring my perspective of the world

when I translate my thoughts into words, and my perception of the data is influenced by my cultural background. I started my ballet education at three years old and have participated in ballet classes as a professional dancer in dance companies for twenty-seven years in different countries (Brazil, United States of America, Canada, and Germany). My background includes a four-year extensive education in ballet, modern dance, dance theatre, flamenco, dance notation, music and dance history in a BA degree from the Folkwang University of the Arts[2] in Essen-Germany. I was awarded a distinction in my postgraduate studies, which examined the impact of a ballet company culture on the professional dancers' identity (Dornelles de Almeida, 2012). In this work I identified three embodiment processes in professional ballet dancers' work in a ballet dance company: pain and injuries, institutional elements forming a type of body and movement, and, finally, a spiritual element which I called 'dancing with the soul' (Dornelles de Almeida, Flores-Pereira, 2013). Since 2014, I have been working as ballet lecturer at the Federal University of Viçosa-Brazil.

An important part of this study was that my interpretation of the research data is interspersed with the dancers' own interpretations of their sensations, feelings, and thoughts about their ballet class. My cross-cultural background in dance education and professional experience as a dancer thus shaped a multi-layered methodological framework which allowed me to interact with the dancers in the selected London ballet institutions. To navigate this complex and rich exchange, I followed psychologist Sonya Dwyer's (2009:59) approach of remaining reflexive about all experiences of the fieldwork to deal with the dichotomy of the 'insider-outsider' positionality.

I did not presuppose what the key sensorial elements are for the professional ballet dancer in these London ballet classes. Instead, my experiences of insider and outsider led me to search for studies on the dancer's sensorial engagement in the daily class informing their

[2] Rudolf Laban and Kurt Joos, the founders of this university, shared with Pina Bausch (director of the Dance programme when I studied there) a dance philosophy uniting anatomy, psychology and kinesiology in the teacher's practice in the university setting. Moreover, Jooss' philosophy disseminated in the classes I participated in at the Folkwang an internationally 'modernist style of ballet', borrowing dance historian Ramsay Burt's words (2000:129).

learning and experiencing the technique (of ballet) to investigate their sensorium. In the absence of those, I was inspired by studies on dancer's sensorium in other dance genres and at other levels (amateurs, semi-professionals) and by studies which broadened the spectrum of the senses in the sensorium. I also draw on studies which do not consider the sensorium but explore individual dancer's senses, and, finally, studies which explore the democratisation of ballet pedagogy, yet they do not discuss the senses. The rationale for selecting these studies will be discussed in Chapter 1.

As a researcher from Brazil and a cultural outsider in London, investigating the dancers' senses in ballet class made me curious about how to develop a more egalitarian use of the senses in learning. For this reason, the epistemologies of the South through the concepts of 'deep experience of the senses' and '*corazonar*' developed by sociologist Boaventura de Sousa Santos (2018 p.165/ p.100) serve as a theoretical basis for my study of the dancer's multisensorial learning. The principal research question that guided the development of this thesis is: How can the professional ballet dancer's engagement with multiple senses promote more democratic learning in the ballet class?

Other important but secondary questions were:

- Which senses impact the professional dancer's learning (physicality, emotions, social relations) in the selected ballet classes in London?

- How does the class, as a cultural space within an institutional setting, impact the formation of the dancer's sensorium?

- How do knowledges from the epistemologies of the South contribute to create a London ballet scene with a more inclusive and democratic use of senses in the ballet class?

The importance of the daily ballet class

The profession of dancers in all ballet companies, including those in London, entails certain practices, such as daily classes, rehearsals and performances. While performances and

rehearsals are part of the dancer's career and are structured around the performing seasons, the daily class is the constant and essential component in every professional dancer's life[3]. Depending on the dancer's institutional affiliation, the ballet class is a core aspect of the daily and weekly professional schedule. The daily class is usually the first scheduled activity of a working day. Its function is multiple. The class offers a unified place and time for dancers to meet and interact daily. For dance teacher Maria Fay (1997) of Hungarian origin residing and teaching in London, the class enables dancers to refine the coordination, strength, flexibility and agility of their movements. This is to say, the daily class improves the physical and artistic proficiency of the dancer and serves as conditioning and preparation for performance. As a basis of the daily activity, the ballet class then foregrounds and supports the learning of different choreographic styles, according to the company's vision.

The class structure consists of sequences of movements carried out to various music scores and taught by a teacher to a group of dancers. The ballet class size varies according to the institutional setting investigated; it may range from 20 to 30 dancers in a dance studio setting to several dozens of dancers in a typical professional class in a ballet institution, such as an opera house-based company. The space where class commonly takes place is in a studio or theatre exclusively for ballet company members. In the case of an independent ballet institution, open classes for professional dancers happen only in a studio. This class space in an independent studio is not exclusive and different professionals across ballet companies, and also outside of them (e.g., freelance dancers) can join the class by paying a fee.

A ballet class is divided into two parts of approximately 45 minutes each: the barre and the centre. The first part of the class, known as 'the barre', is done by all dancers simultaneously and is often structured with ballet movement principles such as the warm up, *pliés, battements tendus, battement jetés, ronds de jambe, battements fondus, battements frappés,* and *grand battements*. The dancers use the barre as a gentle support to test balance

[3] For dance critic and writer Barbara Newman (2004), during their careers, professional ballet dancers need to keep up with regular and intensive ballet classes across the year, even when on holiday.

and placement in a vertical axis feeling the amount of strength, weight distribution, and energy required to do the movements. The barre prepares the core and foot malleability of the dancers for the centre. There is a brief interval of a few minutes between the 'barre' and the second part of the class, the 'centre', where dancers may engage in different activities (such as stretching, resting, drinking water, changing from flat into pointe shoes, using the restroom or briefly socialising with their peers).

The 'centre' exercises are executed across the space including *adage*, *pirouettes* (turns), pointe work, elevation steps, *petit allegro*, medium and big jumps (from *batterie* to *grand allegro*), and *manège* (combinations executed in a large circle across the room that contain *pirouettes*, jumps and other steps). This second part of the class increases the pace and complexity of movements across the floor (Guest and Bennett, 2007; Vaganova, 1969 [1946]; Schorer, 1999; Fay, 1997; Warren, 1996). The dancers are divided into smaller groups that are rotated alternately. Combinations are often done to both sides of the body – typically, starting with the right side (left hand on the barre). Often the accompanist does not stop playing as each group does the same exercise in order to keep the dancers moving without pauses. As soon as the first group begin the exercise, the dancers from the next group can focus attentively on the music, to time their entrance and position themselves in the centre to do the combination.

The dancer's ability to understand a sequence of movements comes from previous bodily knowledge of executing technical and artistic sequences (*enchaînements*). This knowledge is based on a ballet vocabulary[4] in French terminology learnt through their ballet education at a ballet school or a conservatoire. Professional dancers acquire knowledge over years of practice of such ballet vocabulary in class. Dancers know the names of the movements and steps, and embody the logic within them. For example, the dancer knows how to do a '*plié*', associated with how the movement is implemented in the body. The dancer feels which and how muscles are activated in the '*plié*'. Additionally, the dancer, has a

[4] All ballet terms in French used in this thesis are defined in Appendix E Glossary of ballet vocabulary.

sensorial knowledge of the dynamics and shape of the '*plié*'. The dancer executes the movement, according to a musicality often dictated by the teacher.

In addition to the function and structure, it is important to observe the social and relational aspects of the ballet class, and this is particularly important for the dancer's senses and learning. Relevant to note is that the ballet class is a meeting space, where dancers exchange information, including their personal daily experiences, and learn from each other. The exchange and learning are also extended to the traditional power relations, which include a sense of hierarchy between the teacher as the leader of the class, and dancers as the recipients of knowledge. Further social relations may involve power relations, including differences between the dancers' position in the company's hierarchy and their ballet educational backgrounds. These complex relationships and implicit and explicit power structures may impact upon the group dynamics, including the behaviour of dancers in the class. Importantly, for this thesis, these power relations also impact upon ways in which the dancers sense and learn in this environment.

Methodological framework

a. Sensorial framework

I first address the ways that the senses have been perceived, studied and used in professional ballet classes, according to the aesthetic principles of the technique and as means of transmission of values and beliefs through social relations in different cultures. By 'senses' in this study, I mean the 'apprehension of physical phenomena' as well as 'avenues for the transmission of cultural values', as defined cultural historian Constance Classen (1997:401). In the field of sensory studies, the term 'senses' has a double meaning. It stands for a continuum between the perception of stimuli as well as a vehicle for intellectual cognition. Thus, according to the anthropologist David Howes (2018a: 9), this is an entwined process.

The ‘ways of sensing’ in this thesis captures these multiple meanings of the word ‘sense’, including Howes’ (2016:183) ‘sensation and signification, feeling and meaning’. To understand how people within a specific cultural group give meaning to their senses, the researcher needs to approach the changing contexts in which perception occurs (Howes, 2018d:14). Other scholars who study the senses, such as design anthropologist Sarah Pink (2009) and sociologists of the senses Phillip Vannini, Dennis Waskul and Simon Gottschalk (2010), have also discussed the need to broaden the model of the five senses. To explore the sensory across societies and their sensory hierarchies, these studies of the senses help to overcome the limitations of such Eurocentric and restricted views of the senses. Howes (2018a, 2018b, 2018c, 2018d), together with scholars from varied disciplines, such as sociology, geography, history, philosophy, art, design, biology, psychology, and neuroscience, offer a critique of the limitations of a Western sensory model and the imperialism of sight.

The concept of sensorium

Another important concept in the framework of this study is sensorium. I investigate the system of classification under which the ballet classes as embodied practices in three London institutions produce, transmit and incorporate a hierarchy of the senses through ‘sensorium’, another concept initially developed by Howes (2003:6), and later expanded by Howes and Classen (2014:13). In simple terms, senses mean the ways people perceive and understand the world and transmit their cultural perceptions to others. Analysing the senses includes considering the signification of its sensation, and the meaning of its feeling. As theorised by Howes and Classen (2014), sensorium is the organisation and interpretation of the dynamic interaction of sensorial stimuli in each social context. Sensorium is a useful concept to explain the inner and external sensorial spectrum of the dancer in a ballet class. In my study, the sensorium is composed of internal and external aspects of the dancers’ bodies, which affect their learning and behaviour in class. All this constitutes the complex system, known as the

culturally-based ‘sensorium’. Sensorium is used here to investigate what kind of knowledge is promoted through prioritisation of particular sensorial experiences in different daily classes. This is because each ballet class, as a specific cultural setting, affects the way the ballet dancers embody the technique and apply artistry in their profession through their senses. As Howes and Classen (2014) explain, the individual’s perception of a sensation carries social values and personal meaning with it. These sensory meanings and values are translated into a particular worldview within a group of people, with some of the participants differing on certain sensory values. The fundamental premise underlying the concept of an ‘anthropology of the senses’ is that sensory perception is a ‘cultural, as well as a physical, act’ and forms the basis of human experience (Classen, 1997:401). However, this sensory model serves as a ‘basic perceptual paradigm to be followed or resisted’ (Classen, 1997:402). In this thesis, the sensorium is a culturally grounded concept, one of the central aspects of the framework through which I investigate how the space, participants, environment, and culture of the institutional setting of each ballet class play a role in the dancer’s sensorial learning in three institutions in London. To be able to understand the embodied knowledge of the professional ballet dancer, I propose a more democratic and broader use of the senses, a decolonisation of senses, through the example of London ballet classes. For this reason, it is necessary to understand how the sensorium may be constructed in professional ballet classes in the sample of London institutions.

Whilst sensorium and senses are key aspects through which the dancers’ engagement with ballet classes can be understood, it is important to keep in mind that the ballet class, as part of a European technique, is a space of transmission of cultural values and beliefs. This construct is ingrained in the value system of the class, and deeply affects the dancers’ understanding and value of sensorial modalities, whilst learning the technique.

The concept of decolonial sensing: deep experience of the senses and *corazonar*

Another concept central to my framework, articulated by Santos (2018:165/ p.100), is the notion of 'deep experience of the senses' and '*corazonar*', as the means of a struggle between less recognised epistemologies of the South and the dominant epistemologies of the North.

In this study, I recognise the importance of Santos' (2018:165) 'deep experience of the senses' which provides an alternative to the Western habits that may prioritise cognitive processing of the sensorial input. Whilst studying sociology rather than ballet, Santos (2018) offers an alternative understanding to the interconnectivity of the senses. His alternative to sensorium is based on the notions of decolonial ways of knowing and the South American notion of *corazonar*. Santos (2020) urges for a dialogue[5] between the epistemologies of the North and the epistemologies emerged in the Global South because the latter offer endless alternative thought, ecologies of knowledges[6], political and social innovations, and celebrations of difference.

Santos (2018:165) explains 'deep experience of the senses' as a knowledge based on epistemologies of the South. This knowledge is acquired through embodied experience and conceived through the senses, as well as the feelings they arouse. I use Santos' notion of deep sensing in my framework as it helps to reframe the approach to the understanding of the dancer's senses in the ballet class.

Deep sensing is related to the embodied epistemology, which according to Santos (2018:2), means the 'analysis of the conditions of identification and validation of knowledge in general, as well as justified belief'. In his critique of scientific knowledge rooted in German *Erkenntnistheorie* or *Erkenntnislehre,* Santos (2018:7) argues for the importance of non-verbal embodied knowledge, that he considers as ways of knowing that integrate reasons

[5] Sociologists Santos and Maria Paula Meneses (2020) argue for the social emancipation of the Global South from the domination of the canonical and Eurocentric epistemological tradition. For these scholars, the experience of the world is much broader than that promoted by Eurocentric epistemologies.

[6] Santos (2018:78) concept of 'ecologies of knowledges' unites scientific knowledge with the knowledge from society through 'collective cognitive constructions led by the principles of horizontality (different knowledges recognise the differences between themselves in a non-hierarchical way) and reciprocity (differently incomplete knowledges strengthen themselves by developing relations of complementarity among one another)'.

and emotions. This way of knowing is further layered[7] and includes the notion of corporeal knowledge in which experience of embodiment mobilises individuals and groups based on 'reasons, concepts, thoughts, analyses, or arguments', as well as 'emotions, affections, and feelings' (Santos, 2018:97).

One of the main concepts that Santos (2018:100-101) considers, and one that I adopt in my framework, is *corazonar*. '*Corazonar'* is a concept that was used a long time ago by indigenous South American people and disseminated by musician, philosopher, and anthropologist Patricio Arias Guerreiro (2010a:41; 2010b:29). These indigenous people conceive and think of the world through the senses. For Guerreiro (2010 b), *corazonar* intertwines emotions and reasons. Santos (2018:100-101) further develops the notion of *corazonar* as an 'act of building bridges' and expression of the 'alchemical hybrid of emotions/affects/reasons, the feeling/thinking' inscribed in social relations. Santos uses the concept of *corazonar* to explain different sensorial modalities that come from epistemologies of the South. This notion is similar to the idea of '*sentipensar*' (feeling-thinking) proposed by the sociologist Orlando Fals Borda (2015:10), as a person who 'thinks from the heart and mind' and acts combining reason and love, the body and the heart, a term borrowed from peasants of the Atlantic coast[8].

These particular ways of knowing from the epistemologies of the South help me further to elaborate on the dancer's use of the senses and learning. This does not mean that these two poles are as such geographically divided [9] into 'north' and 'south'. It means an epistemological South against the social struggles of capitalism, colonialism and patriarchy as modern forms of domination, looking for other knowledges and forms of being through an alternative epistemic, intercultural, political, and methodological thinking. Therefore, 'thinking from the

[7] One is the concept of struggle, which nurtures a person's will and capacity to struggle against domination and oppression.

[8] The concept developed by Borda (2015, p.10) of 'sentipensar' and 'sentipensante' is based on his previous sociological research of fishermen from San Martín de la Loba. This idea derives from the fishermen's ancestral practices of thinking with the heart and feeling with the head. Despite the poverty, these fisherman live in social resilience against a dominant way of life in riverside cultures. They are sentient beings that assimilate with a simple philosophy of life, the contingencies of work and the experiences of beings who feel and think with their senses connected to the nature of the river and its savannas, and their ancestral community societies.

[9] Santos (2018) considers East Asia as a geographical North aligned with the epistemologies of the South. The same occurs with some North American indigenous knowledges which are in line with the epistemologies of the South.

South requires an epistemic decolonisation of the world of human experiences', looking for new horizons in the diversity of cultures, politics and epistemologies of the world (Santos, 2020:3).

The theory of Southern epistemologies by Santos (2018) helps me to understand the potential to uncover deeper and alternative connectivity in the sensorium. I use this theory as a way of uncovering something new about the ways ballet dancers sensorially learn in class. This theory also helps me to bridge my knowledge as a Brazilian ballet dancer who embodies the epistemologies of the South, with London classes as examples of Santos' "Northern" ways of knowing. This is also the case with many of the professional dancers participating in my research, whose education was completed in international contexts, including Brazil[10] and are working in ballet companies in London.

For Santos (2018:166), the epistemologies of the North create abyssal thinking associated with a 'capitalist, colonialist, and patriarchal' perspective, in which sight and hearing are prioritised. For example, the senses are socially trained so one sees what one wants to see and hears what one wants to hear. Therefore, as Santos (2018:168) explains, 'different bodies result from the cultural difference inscribed in the senses' establishing hierarchies among the senses. For instance, the same practice may be socially experienced through sight, and also at a deeper level, including other sensorial modalities, such as touch, smell, or hearing. Regarding this matter, one may ask: How might the ballet class, as a daily professional practice, unearth these differences?

The topic of the senses associated with a cultural context, based on Santos, as a concept and method, help me unravel some aspects that dance anthropologist Andrée Grau (2011) and dance scholar Cristina Rosa (2015) noticed about ballet technique which originates from European aristocratic courts. This technique still shapes the dancers today in a very different ballet culture, as well as a broader socio-political setting in the twentieth-first

[10] Fernanda Oliveira (ENB), Jose Alves and Isabella Coracy (BB), and Roberta Marquez (RB) explain this in their interviews.

century. In this ballet culture dancers encounter forms of resistance to patriarchal and colonial forms. Although the traditional culture of the ballet class is widely accepted as hierarchical, with domination and a colonising aspect, it is beginning to be challenged[11]. It is important that this thesis was written during the rise of the #Me Too, and #Black Lives Matter movements[12], for instance. This indicates that there are distinct ways of experiencing the senses depending on the social context. For example, some professional ballet dancers use touch, and feel the touch of the teacher associated with a kinaesthetic-tactile type of learning, whereas other dancers use vision, creating kinaesthetic-visual learning. Both examples constitute different types of multisensory learning through the prioritisation of different senses. In my analysis, I selected different ways of sensing to look at each sense individually and provide evidence on how they impact the professional ballet dancers' learning in the classes in London.

The concepts of *corazonar* and *sentipensar* are investigated in tandem with the concept of 'sensing, thinking and feeling' developed by Grau (2011:7). Studies by Grau (2011) connect the social and cultural aspects of dance practices. She offers a cross-cultural perspective of different corporealities, sensoria and spatial orientations of dancing bodies using a variety of examples, including ballet. Grau (2011:5) considered that 'all corporealities

[11] Dancer and contributor to *Dance Magazine* Courtney Escoyne (2018b) explained the problems regarding hierarchical leadership were reported at New York City Ballet (NYCB) and School of American Ballet (SAB) due to harassment and violence towards the dancers, resulting in artistic director Peter Martins losing his job. In conjunction with the news from English National Ballet, dancers report of feeling pressure in the dance company environment highlights social, cultural and political tensions at ENB, which were also discussed by journalists Kate Buck (2018), Connor Boyd (2018), Teresa Guerreiro (2018) and Mark Brown (2018). Journalist Adam Lusher (2018) draws attention to an NYCB ballerina who filed a lawsuit alleging the sharing of sexually explicit photos of her by male dancers of the company. Moreover, journalist Henry Samuel (2018) addressed the fact that most ballet dancers from Paris Opera Ballet (POB) were either victims of harassment in the workplace or had seen a colleague mistreated. Furthermore, editor of *Dance Magazine* and *Pointe*, Madeline Schrock (2018) outlined a class-action lawsuit from ex-dancers of the Royal Winnipeg Ballet against a teacher and photographer for sexual harassment of minors. Considering this brief list and the recent allegations, these many articles published in the public domain, as newspapers and dance magazines, display the existing power relations between hierarchical positions at ballet companies and schools which affect dancers in ballet practices, including the ballet class.

[12] Decentralised social movements began on social media with the use of hashtags as forms of resistance. The #MeToo movement offers space for complaints of bullying and sexual exploitation in the dance world and had participation from dancers at leading ballet companies such as New York City Ballet, English National Ballet, Paris Opera and Finnish National Ballet, as discussed by journalists Judith Mackrell (2018) and Sara Marsland (2018). The social movement known as #BlackLivesMatter is a space for claims of violence and acts of racial discrimination towards Black people. In the dance world, it discusses Black discrimination and lack of diversity in dance companies, as reported by journalist Brian Schaefer (2016), director Christopher Hampson from Scottish Ballet (2019; 2020) and in the documentary by the director of Ballet Black, *Cassa Pancho* (BBC, 2020).

and spatialities are socially and culturally mediated', emphasising that 'dancing bodies', 'space', 'place' and the 'senses' are embedded within typically Western understandings and cannot be accepted as universal concepts. Grau (2011) mentions ballet technique interconnected with Western understandings of European court dance and classical artistic tradition as representative of a Western theatre dance genre. Literary critic, journalist, and art historian Akim Volinsky (2008:137) and Grau (2011) explained classicism as a value system of verticality. For Grau (2011:10), the ballet dancers embody 'verticality' through their erect body, movements and poses, executed on the top of their toes (half pointe), leaps and jumps in the air 'conquering the vertical space', intending to resist gravity.

According to Grau (2011), three principal points need to be discussed when considering the verticality of dancers in ballet technique. Firstly, it can represent elegance associated with aristocracy and its 'supreme moral perfection' (Grau, 2011:10). Secondly, ballet training[13] with a particular technique and aesthetic, represents values and beliefs of courtly spectacles and monarchical power associated with the owing social classes. Thirdly, ballet verticality can be linked to Western hegemony and spirituality, representing both higher orders and 'control over one's gravity and other people' (Grau, 2011:10). For Grau (2011) the core of ballet technique is to resist gravity through verticality. This verticality is executed through the dancer's entire body, especially when the back is directed upward. The perceived ballet dancer's posture and way of moving, acquired through technique, are linked to a cultural, political, and social sense of pride and elegance originated from the European court dance and a classical artistic tradition from the monarchical power. Regarding this matter, dance

[13] There is a difference between the terms of dance training and dance education. Although not focused on professional ballet dancers but in the inclusion of dance education in children's school curriculum, the scholar in education Susan R. Koff considers the 'foundation of both dance education and dance training' as means of 'learning about the body and how it can move' (2012:28). According to Koff, dance education is an 'exploration of body parts and movements in sequence with the self, others, and the environment, through variations of time, space, and energy' (2012:27/28). Dance education does not seek to prepare children to become performers but aims to develop self-knowledge, self-expression and interpretation through motion. Dance training means learning codified steps, movements and 'strategies for learning specific motor skills with the aim of mastery and future performance', and 'once freedom of movement exploration has been established, dance education may branch off into dance training as the student refines his or her expression' (Koff, 2012:28).

scholar Roger Copeland's (1978:13) analysis of how this European ballet technique was disseminated in Cuba, associates the upright carriage embodied in the technique, and perceived in the ballet dancer's body with pride with people who once were colonised and now are 'standing tall'. This example, from a Latin American country, shows how great classic non-White dancers from a colonised country are educated in the Ballet Nacional de Cuba company and school, yet they embody the European aristocrat technique. This also aligns with Santos' (2018) notion of epistemologies of the dominant 'North' (Europe) brought to the colonised 'South' (Cuba). This verticality of the ballet dancer described by Grau (2011) and Copeland (1978) creates a specific way of knowing how to move, to present the body with a raised chest and head, with mostly the toes touching the floor. This posture is embodied by ballet dancers, regardless of their nationality, as a type of bodily knowledge, and affects the ways dancers breathe. I will discuss this further in Chapter 5. This brief explanation of one of the ballet technique's principle of verticality shows the dancers' embodied bodily knowledge and continuous learning associated with the sensorial (sense of elongated spine with raised chest and head provoking a type of breathing), emotional (expression of a sense of pride and elegance, standing tall), and reason (thinking about maintaining this verticality whilst moving and balancing).

Thus, the ballet dancers learn the technique regarding a particular use of space, representing the social values of a specific place, and acquiring this cultural knowledge through the specific use of their senses. This notion of interconnectedness of space, place, and the senses from a Western cultural perspective is important in my study because the social and cultural setting of each ballet institution investigated impacted the way dancers use their senses, and feel through their senses, to learn in class. Moreover, I associate this with Grau's (2011) notion of verticality to explain one of my main findings of how the verticality of the technique relates to the professional ballet dancers' use of breathing, impacting on their execution of movements in class. For Grau (2015:233) dance 'integrates intellect, our mental apparatus that engages primarily with reason', 'cognition' and 'affect', emphasising 'feeling

and emotion' in a multisensory relationship between human beings. Grau's (2011; 2015) studies relate to Santos' (2018:100-101) notion of *corazonar*, because both fuse emotions/affections with knowledges/reasons as ways of knowing through deep sensing.

Democratisation (inclusivity/interculturality/diversification) in ballet class

To understand how senses can be more democratised in ballet classes in London, I propose the inclusion of concepts that challenge the Eurocentric/Western hierarchical approach. In this respect, there is a new way of learning which can be instituted in ballet, what Alterowitz (2014) calls 'democratisation' of ballet pedagogy. However, the way dancers learn through senses can be another part of such inclusive, intercultural, and diversified learning environment. This is new and part of my framework. As a ballet dancer, teacher and scholar who understands the epistemologies of the South (also in an embodied way too), I propose the 'democratisation', or diversification of dancers' senses by utilising knowledge from Santos (2018) (outside dance studies) and Rosa (2015) (from within the dance studies).

Embodied knowledges in ballet techniques emerged through an active process of selection of senses used and expressed in movements, gestures and intentions which express, and by extension are seen to signify, particular cultural values of what it means to be European. Ballet technique, as a body-centred practice, evokes the power of the colonial, patriarchal, and capitalist characteristics inscribed onto the dancing bodies. Regarding this matter, Rosa (2015:156) suggests that ballet technique is 'a form inherent from and representative of colonial power', within 'Eurocentric patterns of dance production established by state-sponsored companies'. This way of dancing from ballet technique, descending from Europe and migrating from the West to the East and South, is characterised by hierarchical power through an 'embodied system of organisation's ability to shape up local bodies under a Eurocentric episteme' (Rosa, 2015:159). Ballet's corporeal (upright, vertical) and social organisation through a codified and systematised technique disseminate a logic of

the ‘European ballet’ (school, teaching methods, dance company, official theatre, and hierarchical position of dancers) with a ‘tradition derived from aristocratic courts’ (Rosa, 2015:263). In line with this, ballet can be considered as a complex cultural system. It is important to acknowledge that there are struggles derived from this cultural system, which privilege power relations and, in my study, they are specific to different ballet classes and transmitted and felt through the dancer’s senses.

Dancers use their senses in class and produce alternative discourses about themselves and the world they live in. Dancers need to address the ‘tradition’ of education of their senses in class, for instance, the internalisation of an ideal body image, the tradition of single-gender classes, and the struggles as a result of hierarchical relations, known as ballet *emploi*[14]. In this thesis, I propose that only by understanding professional dancers’ ways of sensing in their daily class, it is possible to critically investigate how the senses impact their overall learning, through their physicality, emotions, social relations and cognition. Ultimately, only by understanding these sensorial processes, we can democratise and diversify the learning of ballet technique.

Instead of ballet dancer, I will use here the term balletic dancing body. This shifts the perspective from the dancer as an object of transmission of a particular visual aesthetic, to consider the balletic dancing body as a subject with an inward perception of feelings and senses. Dance scholars Lela Queiroz and Helena Katz (2015:80) already discussed the notion of ‘body-machine’, meaning the ways dancers objectify their bodies. I use the concept of a ‘dancing body’ previously explored by dance scholar Susan Foster (1997:236) to analyse the sensuous balletic dancing bodies in professional classes in London, as sensing moving bodies. This concept of ‘dancing body’ develops the disciplinary procedures in the daily class related to the process of becoming a dancer. In this thesis, I explore in detail these balletic dancing bodies who are subjects with agency and present multiple ways of sensing which are specific

[14] *Emploi* is a French word that means role. In ballet it relates to choreographic roles in which dancers are chosen to perform based on their physical appearance, personality, temperament, or other characteristics.

and impact on their overall learning in the class event.

The senses are culturally framed and there is no consensus between the theoretical perspectives concerning a division/typology of the senses or how the senses are felt. Individual studies offer new perspectives of dancers' sensorial modalities from different techniques and cultural settings, which I will discuss in Chapter 1. Despite the progress of ballet technique, there is still a lack of investigation into professional ballet dancers' sensorium and the relation to their learning in class. For this reason, I consider that the investigation of which senses professional ballet dancers experience in class, and how they are sensed in their learning, require a broader theoretical framework than the notion of the five senses. To explore the method of deep sensing in Santos' (2018) epistemologies of the South, I will focus on particular dancer's sensorial modalities of touch, visuality, and breathing in my study. The selection of these three sensorial modalities is based on my ethnographic findings from professional dancers' interviews and class observations.

Following the epistemologies of the South proposed by Santos (2018), the principles of analysis to understand one sense can be used to investigate others. Santos (2018) discusses different understandings of the senses and learning from an intercultural and deep sensing perspective. For Santos (2018:165), 'knowing' is an activity which involves multiple senses. By recognising the deep experience of senses as one of the premises underlying knowledge in the epistemologies of the South, Santos (2018) challenges the dominant Northern and Western epistemologies. The analysis of the senses requires consideration of multiple perspectives of one sense. For example, reciprocity includes both actions, 'to see and be seen' (Santos, 2018:167). For this reason, to analyse the prioritisation of a dancer's sense, I investigated the context in which it happened. Nonetheless, as a researcher, I acknowledge that the participants' and my understanding of the contexts in which the senses express themselves may differ.

Another element I consider relevant regarding Santos' (2018:167) principle of analysis, is that two or more intersecting senses 'may flow smoothly or clash and affect each other'.

For Santos (2018:167), ‘the crisscrossed multiplicity of the senses is one of the most complex topics in social interactions’ because ‘the same object or practice may be socially constructed to be seen and yet, at a deeper level, it may offer itself to be heard, touched, smelled, or tasted as well’. This intersensoriality proposed by the epistemologies of the South requires the confluence of various senses. However, the instrumental rationality of Western modernity puts at stake the linearity, unidirectionality, and unidimensionality of perception and is not compatible with this kind of sensorial depth. Santos (2018:170-183) divides his analysis of the ‘deep’ senses into three key aspects: deep seeing, deep listening, and deep smelling (which includes tasting and touching). Based on Santos’ (2018:170) premise that ‘what is valid for one sense, is often valid, with adjustments for all others’, I selected particular sensorial modalities to investigate the deep experience of the dancers’ senses in learning.

In Chapters 3, 4 and 5, I discuss each of these selected sensorial modalities in detail exemplifying multiple ways dancers' sense, how they intersect with other senses, and how they vary depending on the dancers’ engagement with the environment. In my study, it is important to consider that the dancers’ senses are socialised differently in the space of the class and that their multiple types of senses are associated with emotions and reasoning processes impacting their learning.

There is a need to recognise that the exploration of the dancers’ sensorium in class can improve their performance, prevent injuries, and contribute to the evolution of the technique. One of the most important senses in ballet technique for the viewer/audience is the visual perception that dancing bodies transmit. In ballet technique, the ballet dancing body transmits visual movements and positions which are internalised and embodied in class. Touch connects the dancer to the teacher to help the kinaesthetic feeling and visuality required in a particular position or dynamic of a movement. However, these are not the only ways vision or touch are felt by dancers in class, and I will explore these multiple ways of sensing in this study.

Ballet is a technique that intends for the bodies to look similar, and mostly it does not look for the individuality of the dancer. The ballet technique prioritises the aesthetic produced

over the sensorial body, the feeling of the body. For example, when ballet dancers are in pain, they learn to cope with it and to smile when the execution of a movement is hurting. The repetitive motions dancers do in class can cause injuries which may be associated with anxieties. These practices are engrained in their bodies. This type of technique mostly does not consider what the balletic dancing body is sensing and feeling from the perspective of the dancer.

In class, ballet dancers learn the technical knowledge about postures, dynamics, movements and steps and also how to position[15] themselves in space. Moreover, the balletic dancing body learns the beliefs and values of a ballet culture which prioritise a disciplined, silent and obedient self[16]. In the social relations in ballet institutions, ballet dancers are educated to respect and follow the instructions from those hierarchically positioned above them (e.g., teachers, directors, rehearsal assistants, choreographers, and their peers ranked as soloists or principals). Nonetheless, ballet dancers are, first and foremost, individuals who carry different values and beliefs.

The ballet class is a social, cultural, and institutional construct regulated through the disposition of values and norms in space and time. For dance scholar Christy Adair (1992:83), 'many of the values and beliefs of the owning classes are reproduced within the ballet training institutions, the technique and the choreography'. Former RB dancer and dance scholar Geraldine Morris (2003) studied the influence of the ballet class on ballet dancers, and discusses how the context of the ballet class can promote perfecting technical movements, moving its focus away from the stylistic diversity in the works of different choreographers the company is performing. For Morris (2003), stylistic values underpinning each ballet training system are associated with the outcome of those values on the dancers' bodies and

[15] For instance, dancers know the timing between sequences (entrance and exit in centre exercises). They learn how to use the space (directions to locate themselves, organise themselves in groups, position themselves to start and end exercises).

[16] The dancers learn various rules of behaviour in the classes in London. For example, dancers are educated to listen to the teacher while they talk, polish a faulty step or movement, ask for the teacher's permission in case they need to stop or leave early, and respect all members demonstrating a positive attitude. Dancers are advised to arrive on time to warm up before class, remove adornment objects, and respect the dress code. Additionally, dancers may avoid the front of the class in case they do not know the combination.

their approach to movement. Historian of dance and art, Beth Genné (1995:445) explains how British dancer and teacher Phyllis Bedells already showed her concern 'to improve British dance training' when in 1920 she helped to establish the Association of Operatic, which later became the Royal Academy of Dancing. Further, dance scholar Jessica Zeller (2017:99) argues that the 'traditional model of instruction has long required students to quietly comply with the pedagogue's directives', questioning a type of authoritarian ballet pedagogy. Alterowitz (2014:11) argues that the ballet institutions continuously stage socially constructed, normative notions of gender, race, and class associated with a high art that 'holds so tightly to its past, to what has made it successful already, that its rootedness impedes progress'. I agree with Alterowitz (2014:11), that 'it is necessary to rethink ballet's teaching practices, so they reflect more clearly the values of contemporary society', and the technique developed in contemporary ballet choreographies.

The ballet class evolved since its codification, and the knowledge from other techniques of the body and scientific discoveries in specific areas, such as dance, psychology, medicine, physiotherapy, and anthropology, contributed to the wellbeing and longevity of ballet dancers' careers. Part of the evolution of ballet technique concerns the importance of how a step or movement is executed more than its visual form. Despite the evolution of ballet, visuality continues to prevail as the main sensorial characteristic of the ballet technique prioritised in hegemonic institutions (mainstream) of ballet technique in London when considered from the viewer's perspective. Yet, when considered from the dancer's perspective, visuality as an external sense is not the most important element, and there are other senses which can enhance the dancer's learning. Although there has been an evolution in ballet technique since its conception, it still needs to pay attention as much to the dancer's internal as external senses, to prevent injuries and enhance learning in class. The understanding of internal and external senses is Eurocentric in ballet technique. Nonetheless, the notion of what is a sense still needs to be addressed by contemporary scientists as the diverse disciplines (anthropology, sociology, history, geography, biology, psychology,

neuroscience, art and design) conceptualise the senses differently (Howes, 2018). Balletic dancing bodies at a professional level constantly pay attention to their sensorial processes through internal dialogues with themselves, in their minds. These internal dialogues, or self-talk, guide them to act in class, for instance, to stop or continue when they feel pain. I understand professional ballet dancers as thoughtful and sentient individuals who learn through a corporeal knowledge acquired from their own sensorial experiences, the teacher's guidance, as well as from their colleagues and every space of the class.

b. Ethnographic approach

To explore sensorial modalities already in place in London ballet classes, in addition to the conceptual framework, my methodology also involved empirical study. Through ethnographic work, including participant observations (Geertz, 1973; Spradley, 1980; Pavis, 2003 [1996]), I learnt from London-based dancers at studios and theatres and I observed ballet classes within the three selected institutions. I also participated in some of these ballet classes to gain a related embodied experience of the dancers (Hsu, 1999; Hahn, 2007; Potter, 2007; Cazemajou, 2011; Skinner, 2018). Additionally, I interviewed dancers (based on models by Skinner, 2012; Spradley, 1979; Farnell and Varella, 2008) to understand their first-hand interpretation of the sensorial experiences in classes. Chapter 2 discusses in detail the methodology used in my study.

The organisation of content

This introduction presented the main concepts of my theoretical framework. To show how dancers' ways of sensing are associated with their learning in professional ballet classes, the study follows with Chapter one outlining where my thesis sits in the field. My multidisciplinary approach and the relevant literature serve to explain how the decolonisation

of the dancers' senses may contribute to democratise the ballet class. Chapter two explains the choice of London as one of the major ballet centres to do fieldwork and introduces the three key institutions and the participants: professional ballet dancers who are also teachers at ballet companies (English National Ballet, Ballet Black) and an independent studio (DanceWorks) in London. Each of these ballet institutions produces a particular type of ballet class as a specific socio-cultural space. These are seen as discrete sensory environments that promote a specific set of sensorial motivations. In this chapter, I also describe the methodology focused on ethnographic methods (interviewing, observation, and participation). Chapters three, four and five discuss the findings of the ethnographic work. Each chapter focuses on a particular sensorial example – haptic sense, visuality, and breath (respectively). Although the senses are interconnected, these chapters analyse how sensorial differences may shape the dancers' learning across three professional institutions. In Chapter six, I bring into focus an understanding of the sensorial interconnectedness, that may help to democratise and decolonise the dancers' senses in learning in the ballet class.

I extend Santos' (2018:165) idea of a subject with 'deep sensing' interwoven with the experience of the senses, sensations, emotions, and reasoning forming the dancers' ways of knowing. I show that dancers learn through different modes of attending to and with multiple senses, which I call multisensorial learning. This discussion of how the study of detailed and interlinked utilisation and further, more balanced development of the sensorium, can help the ballet classes become more democratised learning spaces and sensitive to the dancers' needs. I argue that only such an approach can promote greater ballet diversity, inclusion and interculturality regarding the dancers' sensorial. The London ballet scene is already diverse, including international dancers, teachers, choreographers, and directors, but it is not diversifying the sensorium enough. For this reason, I will explore how a more egalitarian use of multiple ways of sensing by professional ballet dancers can promote a new way of learning in ballet class which matches the diversity that exists in the London scene.

Chapter 1 – Overall concepts

This chapter presents the overall concepts about the professional ballet dancer's sensorial learning in the environment of the class. Professional ballet dancers acquire and refine specialised knowledge of the technique and artistry in the daily class through multiple sensorial modalities which are prioritised and interconnected differently. Each ballet class has its own social and cultural setting, and it is never a neutral space, rather it is a complex practice where dancers make sense of the world through their sensorial. The senses are culturally framed and there is no consensus between the theoretical perspectives concerning a division/typology of the senses or how they are felt.

The notions of what constitutes bodily senses, its classification and functions vary across different cultures. Philosopher Aristotle (ca. 350 BC) discussed the selection of five senses of sight, sound, smell, taste and touch in his work *De Anima* (2002 [1968]). Based on the physics and physiology of perception, Aristotle (2002 [1968]) argues that each sense has a sense-organ (e.g., eye, ear), a medium to be felt (e.g., air, water), and its own proper object (e.g., sight – colour, hearing – sound). For Aristotle (2002 [1968]), perception involves the relation between the sense-organ and an external object in a causal process. Many Euro-American scholars still prioritise one or more of the five primary senses of Aristotle's (2002 [1968]) model and consider those as key for the composition of the sensorium. Grau (2011) explains that ballet is rooted in Western culture, where vision is culturally dominant. Therefore, when ballet is practised in different cultural environments, in many parts of the world it still prioritises an ocularcentric perspective of the world.

In twentieth-century dance studies, a study of three dance genres by dance anthropologist Cynthia Jean Cohen Bull (1997) found that dancers prioritised different senses. According to Bull (1997), in ballet practice and performance, dancers prioritised the sense of seeing, whilst dancers in contact improvisation privileged the sense of touch, whilst traditional Gha-

naian dancers gave primacy to the aural sense. Although Bull's study provides a generalisation of the dancers' prioritisation of one sense associated with a particular dance genre, it still broadens the conversation about ways in which the dancers used their senses in various forms. According to Bull (1997:282), ballet is 'highly organised by the visual sense', yet it is also 'strongly related to the sense of touch'. My study expands on Bull's findings by inquiring more deeply into the interconnection of the senses of touch and vision as observed in the ballet classes in London.

Apart from vision and touch, dancers feel other sensorial modalities which expand the notion of the five bodily senses in ballet. Foster (1997) analysed cultural aspects of five different dance techniques: ballet, Duncan, Graham, Cunningham and contact improvisation. For Foster (1997:237), 'the dancer's perceived body derives primarily from sensory information that is visual, aural, haptic, olfactory, and perhaps, most important kinaesthetic'. In addition to investigating new sensory modalities such as kinaesthesia, my study also explores the multiple ways ballet dancers use their senses associated with learning in class.

Sports scientist Susanne Ravn's (2009) cross-cultural study investigated professional dancers' perspectives of sensing movement in ballet, butoh and contemporary dance. Ravn (2009) notes that in ballet class, rehearsals and performances at The Royal Danish Ballet, the dancers' principal senses and ways of sensing movement were vision, hearing, energy, weight, and kinaesthesia. Differently from Ravn's (2009) study, I explore how these ways of sensing are interconnected, forming the dancers' sensoria to learn in class.

Another study that further developed Aristotle's model exploring other sensorial modalities is dance scholar Angela Pickard's (2015) work on the cultural aspects of the ballet class. Pickard explains how amateur dancers become mindful of the movements they make through sensations of pain and pleasure. Whilst her research does not explore professional ballet dancers, Pickard's study is useful to think about how sensorial modalities can impact the dancers' learning in class.

Although not investigating ballet, anthropologist Caroline Potter (2007) and dance scholar Cynthia Roses-Thema (2007) explored contemporary dancers' sensorial modalities. Potter (2007) participated in dance classes at the London Contemporary Dance School and explored the amateur contemporary dancers' sensorium, comprising of intertwined sensory experiences of kinaesthesia, heat, pain, taste, touch, sound, and vision. Potter's (2007:24) aim was to identify the relation of the sensorium with the formation of the cultural identity of 'becoming' a dancer. Investigating contemporary dancers' sensory experiences in performances, Roses-Thema (2007) proposes a framework of the senses divided into interoception and exteroception. Roses-Thema (2007) analysed the dancers' breathing, core temperature, heartbeat, and health issues, such as chronic pain, as feelings of the internal state of the body (interoception). The dancer's perception of the audience's visual contact and energy, the musical cues and the lights, and the use of costumes were considered responses to stimuli originated outside of the body (exteroception). Roses-Thema (2007) found that dancers monitored the background state of the body continuously and interoception became conscious when something unexpected happened, for example, pain and injury. The studies by Foster (1997), Ravn (2015) and Pickard (2015) on ballet dancers, and Potter (2007) and Roses-Thema (2007) on contemporary dancers broaden the notion of the five senses. Potter's and Roses-Thema's studies are useful because they explore the dancers' sensorium. Drawing on these studies, I investigate the professional ballet dancers' sensoria in relation to their learning, taking into account the different social and cultural contexts where classes occur.

The idea that knowledge is embodied implies recognising that it is an activity involving multiple sensorial modalities. Scholarship outside dance studies shows that it is possible to extend sensorial perceptions far beyond the Aristotelian model. Looking to expand Western thought on the five bodily senses, Geurts (2002) discovered in her study of the sensorium of the Anlo people in Africa other senses, such as balance, kinaesthesia, pleasure, and pain. For Geurts (2002:253), 'Western European/Euro American folk ideology of the senses limits sensory modalities to bodily functions by which the mind can obtain knowledge of the external

world'. Even it was created at the beginning of the nineteenth century, the notion of a sensory scale of races by natural historian Lorenz Oken is still a discriminative indicator in societies nowadays, explained Classen (2012) and Howes (2013). This scale classified races based on the people's primary sensory modality disseminating a 'high culture' which suppressed 'lower senses' (Classen, 2012: xii). At 'the top' of the scale were the European people because they prioritised 'the visual world' associated with reasoning, characterised as 'eye-man'. In opposition, the African people were positioned at 'the bottom' of the scale because their use of touch was associated with emotions, characterised as 'skin-man' (Classen, 2012: xii). Moreover, Howes (1991) and Classen (2012) explained that the notion of the 'five senses' influences the way people think and learn in Western cultures. These studies broaden understanding of the notion that sensorial perceptions vary according to the cultural environment. The approaches of these studies inspired me to investigate how ballet dancers learn with multiple and interconnected senses in class, forming their sensorium because of their cultural account of the sensorial perception.

Dancers encounter an abundant variety of sensory perceptions and these perceptions cannot be attended to all at once. For this reason, dancers may shift their attention between multiple senses in class. To study the dancers' senses, it is necessary to explore their perception and the sensations that accompany them as they impact the way dancers learn the technique and artistry. Although not studying ballet, philosopher Maurice Merleau-Ponty (2012 [1945]: 230) defines bodily senses as a means by which human beings perceive and engage with the world. Merleau-Ponty (2012 [1945]) theorises bodies as physically embodied and environmentally embedded. According to his phenomenological theory, sensations are a function of the senses. The perception or awareness or accumulation of bodily memory are experienced through the senses. Merleau-Ponty's theory is in tune with the epistemologies of the North because it expresses a universal human characteristic to explain bodily cultures and power relations.

In contrast, in the epistemologies of the South, Santos offers the notion of Southern

ways of knowing with a different framework of the senses from Aristotle. Santos (2018:165) states that 'knowledge is not possible without experience, and experience is inconceivable without the senses and the feelings they arouse in us'. For Santos (2018:165), 'the senses are essential for knowing' and broadly interconnected with culture; for this reason, it is hard to understand why many studies from 'the epistemologies of the North have paid so little attention to them'. Santos (2018:93) goes beyond Merleau-Ponty's (2012 [1945]) ideas to argue for a deeper engagement with the senses, for instance, in Euro-Western notions of 'bodily knowledge' in dance.

I follow Santos' (2018:165) premise that 'the epistemologies of the North' need to recognise other non-Western knowledges and consider the senses 'as sources of knowledge'. As an example of deep sensing, Santos (2018:171) suggests the researcher should take into account that 'bodies' are 'unequal', and these differences define the ways in which they are 'seen', 'see themselves', and 'see the researcher'. In this way, Santos includes an element of reciprocity to the analysis of the senses. Santos (2018) recognises other ways of knowing, the notion of individualised, unequal bodies, which feel a variety of ways through deep sensing in social and cultural relationships of struggle and experience. Santos' (2018) expands the notion of *corazonar* and how a sense can be perceived and analysed. Based on this, I explore how dancers learn with their sensorial in class. This is how knowledge from the epistemologies of the South can bring new information to my study.

Santos conceptualises senses as means of perceiving the world associated with feelings and reasoning in his development of the notion of *corazonar*. By analysing one's senses, including feelings and reasoning, Santos considers the person as a whole. For Santos (2018), through their senses, individuals embody relations of social domination and, in order to change such a situation of struggle and inequality, it is important to understand and acknowledge how the senses are used and conditioned. Aristotle's (2002 [1968]) model of five senses constitutes a limited framework based on the causal relationship of a sense-organ and an external object. In contrast to Aristotle's theory, the epistemologies of the South offer

a broader understanding of the senses, through the notion of deep sensing, *corazonar*, and the multiple interpretations one can give to what they sense.

In my study, Santos' (2018) perspective is useful because it considers the person's feelings, reasoning, and emotions, providing me with the support to investigate how dancers learn and apply artistry with their senses in class. I focus in particular on three senses as case studies: visuality, haptic sense and breath, based on the findings from my ethnographic study of the three ballet institutions. To explore how key professional dancers' sensorial modalities can promote more democratic learning in ballet classes, I present the literature which guided my interpretation of the results.

1.1 Decolonising the dancers' senses promotes democratisation of the ballet class

Santos' (2018) concepts of *corazonar* and deep sensing, as types of human knowledge, show an expanded model of sensing. Santos (2018:100-101) defines *corazonar* as emotions/affections and emotional or affective ways of knowing, including a spiritual dimension from a decolonising perspective. According to dance scholar Janet O'Shea (2018:751), the term 'decolonisation' in dance means actions against the conditions created by colonialism. For O'Shea (2018:751), dance scholars need to adopt 'a new epistemological frame' towards a commonality that gives agency and visibility to those previously marginalised, considering a 'geopolitical configuration of different kinds of knowledge'. Although O'Shea focuses on broadening the education of different dance genres in the university setting, I expand on her idea of decolonisation of dance to call for decolonisation and democratisation of the professional ballet dancers' senses.

Some studies of ballet as a cultural space from the North/Western scholarship make decolonial shifts and their research represents an analogue to *corazonar*. For instance, in dance anthropology, Grau (2011) explored which elements compose human knowledge in a cross-cultural study of dancers' corporeality, spatiality and sensibility, with examples from

ballet, Balinese, and Tiwi dance. For Grau (2011:7), 'human experiences are not all of the same order. Sensing, feeling and thinking, for example, are all part of human knowledge and they do not operate in isolation'. From a similar perspective, a study by philosopher Maxine Sheets-Johnstone (2000 p.360) considers that young dancers' bodily knowledge and their acquisition of skills occur through mental, emotional states and tactile-kinaesthetic sensations, continuously remembered in movement as a 'habit memory'. These notions by Grau (2011), Sheets-Johnstone (2000) and Santos (2018) inspired me to explore how dancers in the daily ballet class may acquire knowledge through sensing, thinking and feeling in multiple, culture-specific ways. Yet, a decolonial approach to the senses is relevant because these unique studies do not consider the sensorium and the social domination that occurs through the use of the dancers' senses in ballet class.

One way to think about the decolonisation of the senses is to recognise that ballet in the contemporaneity developed with help from other forms of moving, such as somatic practices, which focus on particular senses, such as kinaesthesia. For instance, the study of rehabilitation of the body by Joseph Pilates was influential in ballet pedagogy. As dance scholar Elizabeth Lowe Ahearn (2006) explains, Pilates' method unites breathing, flexibility, strength, and precision of movement. Other examples of integration of somatic practice in ballet include Irene Dowd's (1995) 'neuromuscular' method[17], and Eric Franklin's method (2014[1996]), which sets exercises focused on sensory imagery, anatomical, and kinesiological principles with the aim of improving dancers' alignment in ballet technique and injury prevention. Somatic techniques became popular in ballet during the second half of the twentieth century, giving the practitioners tools and a vocabulary to explore dancers' perception of their anatomy. Ballet dancers also enhance their sensoriality in ballet technique based on alternative bodily practices, such as yoga and meditation. One element these

[17] Practised in Canada's National Ballet School (NBS, 2019). As explained on their website, the NBS "Professional Programme: Dance Education" includes a conditioning programme which relies on cardio work and exercise sequences in the School's swimming pool and the conditioning sequences, based on the work of Irene Dowd (1995), and integrated into daily ballet classes.

methods and practices have in common is the focus on breathing, which is not considered as a sense in Eurocentric thinking.

Ballet dancers learn in multiple ways with their senses in class. Dance teacher and psychologist Christine Hanrahan and psychologist John H. Salmela's (1990:19) study of the use of imagery by intermediate ballet dancers indicates improvement of the dancers' skilled performance based on 'sensations that the dancer has already seen or felt'. The quality of the image can help dancers feel the nature and direction of the energy flow[18] in movement execution and expression. These images can be from past experiences, such as being submerged in water, or 'pure fantasy of non-existent objects or phenomena, such as being filled with the colour red' (Hanrahan and Salmela, 1990:19). Dance scholar Paula Salosaari (2001) investigated the promotion of dancers' visual and internal conceptualisations of imagery in ballet class to stimulate particular movement sensations. Salosaari (2001) taught ballet to young dancers and explored how the application of visual imagery developed their creative interpretation of set ballet vocabulary.

According to sports scientists Sanna M. Nordin and Jennifer Cumming (2006), the dancers' use of mental imagery results on higher self-confidence and effective movement execution. Most dancers learn since early ballet education from their teachers how to use mental imagery. Similarly, a study by Hanrahan and sports psychologist Ineke Vergeer (2001) with modern dance professionals classify multiple uses of mental imagery, helping dancers to build confidence, calm down, prepare for a performance, and choreograph. Furthermore, the dancers used imagery, 'seeking to integrate mind, body and spirituality not only into their

[18] Psychologist Mihaly Csikszentmihalyi (1997[1975], 2002) defined flow as the experience of performers or athletes being deeply immersed in an activity. For psychologist Jeanne Nakamura and Csikszentmihalyi (2002:90), in a state of flow the person is fully confident in their ability with 'intense and focused concentration' merging action and awareness, loss of reflective self-consciousness (i.e. loss of awareness of oneself as a social actor, a sense that one can control one's actions; that is, a sense that one can in principle deal with the situation because one knows how to respond to whatever happens next), 'distortion of temporal experience', and 'experience of the activity as intrinsically rewarding'. To achieve a state of flow, experts need to receive feedback from their movements indicating that everything is in tune. For sports scientist John Toner, philosopher Barbara Gail Montero and psychologist Aidan Moran (2016) and philosopher Giovanna Colombetti (2011) flow is characterised by a pre-reflective level of awareness because the body is not absent from the experience as it remains as a source of feeling, affect, agency, and expressivity.

dance training and performance contexts but also into their lifestyle' (Hanrahan and Vergeer, 2001:249). Sports scientist Bettina Bläsing and psychologists Emily Cross, Corinne Jola, Juliane Honisch, and Catherine Stevens (2012:304) identify how dancers use mental imagery as a tool for learning and optimising movements to memorise 'long complex phrases and to improve movement quality in terms of spatiotemporal adaptation and artistic expression'. For dance researcher Tanya Berg (2016:219), dancers feel 'artistic freedom' when teachers suggest mental imagery in class. These studies with ballet dancers (Hanrahan and Salmela, 1990; Salosaari, 2001; Nordin and Cumming, 2006; Franklin, 2013; Berg, 2016), with modern dancers (Hanrahan and Vergeer,2001), and contemporary dancers (Roses-Thema, 2007), reveal how dancers enhance their awareness, the kinaesthetic feeling, and the quality of movement execution with the support of visual images in their minds. For these scholars, the dancer's practice makes these images more vivid. In my study, ballet movements were saturated with images, and the use of imagery in class changed the way dancers understood their senses when moving.

As independent scholar Elizabeth Robinson (2017:42) argues, 'in bodily work, it is not sufficient to only watch or even to take in through all the senses while learning an embodied technique or skill. The technique must also be actively expressed and reinterpreted back through the senses'. This means that the learning process depends on the dancer's sensorial, emotional and rational engagement with the elements of the class. Following this idea, I draw on a study by Elisabeth Gibbons (2007) to help me explore the term democratisation in the ballet class. For Gibbons, three key elements are important for learning: both dancers and teachers can make decisions in class; there is an acknowledgement that dancers and teachers may have familiarity with different teaching styles, and that teaching involves previous and conscious decisions. Although Gibbons (2007) is focused only on the relation between dancer and teacher, I bring this notion of dance pedagogy to investigate the democratisation of professional ballet classes through the dancers' perspective of their sensorial learning.

Based on the studies by Robinson (2017) and Gibbons (2007), ballet dancers respond to different stimuli, including the teacher's pedagogic method, and these stimuli influence the way they utilise their senses in class.

In my study, ballet dancers face situations daily in class and make individual choices of action. For this reason, I use the concept of agency developed by sociologist Anthony Giddens (1984:9) defined as the power and capability of acting as a person wishes. This power of action is what I mean by agency, when dancers monitor reflexively themselves and are able to act. Nevertheless, other individuals' contribution can help for an incident to happen. For example, when dancers use their breathing in different ways, based on the teacher's guidance who then lets them decide what suits them best.

To discuss the decolonisation of dancers' senses, it is important to consider that the ballet class is a society, with members who learn and teach through intensive, tacit, informal, and weakly sanctioned set of rules. These rules guide how the dancers must use their senses, promote specific behaviours, and embody ballet technique and *habitus.* As Giddens (1984:22) states, 'as social actors, all human beings are highly learnt in respect of knowledge which they possess and apply in the production and reproduction of day-to-day social encounters'. This perspective helps me to understand how dancers learn through their senses. For this reason, I foster a broader and inclusive perspective of the dancers' different sensorial ways of learning in professional ballet classes.

1.2 Dancers' sensorial learning in the professional ballet class

Given that it is a constant part of the professional ballet dancer's life, the daily ballet class is a rich and important terrain for a study of the dancers' senses. It is important to consider whether the cultural and social context of the class stimulates different sensorial experiences. The idea that ballet is a particular cultural practice was articulated several decades ago in the seminal work by dance anthropologist Joann Wheeler Kealiinohomoku

(2001 [1983]). For Kealiinohomoku, ballet is an ethnic dance of European cultural heritage, with stylised Western customs and aesthetic values, for instance, dancers' long and slim bodies. The works of Kealiinhomoku (2001 [1983]), Rosa (2015), and Santos (2018) each investigate different topics, though they all discuss the influence of cultural forms of Western customs and values on the embodiment of individuals of a group.

The notion of the sensory experience culturally framed connects to the theory of epistemologies of the South proposed by Santos (2018) and serves as the basis for me to think about professional ballet dancers' senses to learn in class. As noted by anthropologist Elisabeth Hsu (2008:433), the 'sensory experience is socially made and mediated', presupposing a primordial bodily experience in which mental and physical are interconnected with a cultural form.

In the ballet class, dancers acquire cultural knowledge on how to perform 'codified and stylised movements and postures', as discussed by the performance scholar Deidre Sklar (2008:88). This codified ballet technique is socially 'structured, transformed and mediated', (Sklar, 2008:103). Sklar (2008:91) argues that dancers may have 'lucid moments of seeing themselves' when performing a *plié* in the studio, while agreeing 'to the perceptual, ideological, and aesthetic conventions of a sociocultural system that values ballet'. At this moment, the dancers may consciously feel the 'sensations of toes gripping, quads clenching, spine extending, wrist softening, breath suspending' and may additionally use visual imagination (Sklar,2008:91). Such 'cultural background influences what one perceives and how one interprets what she perceives' (Sklar, 1991:8). Sklar (1991) considers the cultural knowledge embodied in movement as an embodied emotional experience associated with cultural learning. Sklar's discussion is relevant to my research because I consider ballet dancers' subjective bodily engagement in class as tacit and internalised through sensations of moving. In consideration of this, I examine each ballet class in the three institutions in London as particular manifestations of the ballet culture, and for their prioritisation of sensory preferences.

Furthermore, Sklar (2008:85) argues for the examination of felt dimensions of movement, in particular, the 'kinetic vitality as an overlooked aspect of embodied knowledge'. As a researcher, who dances and writes about dance, I tried to make sense of my own and other dancers' embodied knowledge, using my body as analytical insight. I follow Sklar's (2000:71) approach of relying on the way I feel sensations as 'dimensions of movement experience', which I consider in this thesis as sensorial learning. Sklar's (2008) work in the dance context can be examined together with Santos' (2018) concept of *corazonar*, given that both explore the specificity of feeling the body through the senses and emotions associated with the values and conventions of a particular sociocultural system.

Howes and Classen (2014) argue that, depending on their cultural positionality, people experience, perceive, prioritise, and interpret their senses differently, impacting their sensorium. For Howes and Classen (2014), people of different cultures have various ways of sensing. Howes (1991:28) thinks of culture in terms of the organisation of the sensorium 'attending to some types of perception more than others'. In the same way as sociologist Stuart Hall (1997), in their study, Howes and Classen (2014), consider culture as processes of shared knowledge transmitted amongst members of a group. These meanings can be explicit or implicit, conscious or unconscious. Although focused on the role of media rather than dance, Hall (1997) defines culture as a space of production and reproduction of struggles and domination. This idea is important to consider because according to Hall (1997:2), culture involves people's 'feelings, attachments and emotions as well as concepts and ideas'. The way a person senses and perceives depends on how accustomed they are to a sensation and what it means to them. Whilst individual, such sensations may also be learnt and shared across members of a cultural group.

Outside the context of dance and sensing, anthropologist Greg Downey (2010b) studies how culture may affect embodied learning of athletes and capoeira practitioners. For Downey (2010b), different forms of expertise amongst members of the same training regime

are a result of their individual cultural experiences (such as their background, perceptual acuity, physiological conditioning, ways of processing information, training experiences, own coaching, and technique). These are the key elements of Downey's (2010a:35) theory of a skills-based model of culture, in which 'embodied knowledge' in a particular culture is modified by behaviour, training, and experience. This theory is helpful to understand the variety of elements involved in professional ballet dancers' learning which influence their sensoria based on the ballet cultural setting. Dancers in my study are also individuals who share classes (education), so their embodied learning, much like in Downey's theory, may be seen as a skill-based model of (ballet) culture.

Ballet technique is a dance form of embodied skill with over four hundred years of cultural history. It is articulated as a shared education regime with recognisable core elements of verticality, turn out, five basic foot positions, pointed toes, grace, precision, placement, lifted and extended limbs. These elements are described as socio-cultural traits by dance historian Jennifer Homans (2010:19/20). Despite the changes in ballet technique, its core elements are not discussed in depth regarding their impact on dancers' senses in class. For instance, in my study, I identified that dancers' sense of verticality may influence their breathing. Homans (2010) observed historical changes in ballet, such as class structure, gender, costume, the notions of an ideal body and the dancer's physicality. All these elements of the class may affect the dancers' senses. For dance scholar Jennifer Fischer (2015), ballet technique adapted over its history in accordance with its socio-cultural shifts. However, there continues to be less discussion on the senses dancers engage with learn and their sensorium in class.

Ballet's long history evolved with the discovery of other ways of understanding the body. According to the ballet master Carlo Blasis (1830), ballet was conceived and codified as a technique with an emphasis on the presentation of the shape and form of the movement. Since its conceptualisation during the Renaissance in European courts, ballet technique celebrates a physical, ethereal form, already explored in the Foster's (1995:1) study. In ballet

technique, dancers are mostly perceived through external senses, such as vision.

Despite the differences[19] between ballet methods, schools and styles, the ballet technique disseminates particular values through a 'ballet culture' which is not universal. Yet, ballet technique perpetuates similar characteristics, (promotion of hierarchy, a specific type of similar dancing bodies in space and time, disciplined bodies) in which visuality is the main sensorial avenue of communication. This means dancers may internalise technical knowledge from diverse international ballet backgrounds. For instance, even though ballet is still rooted in Western-centric/European form of dance, many participants in my study are not from Europe. Many of these dancers did their ballet education in international ballet schools that teach different[20] ballet methods, schools, and styles. Nonetheless, all share a training regimen (to borrow Downey's (2010a) term again), working in dance companies in London, such as English National Ballet, or Ballet Black. The dancers' learning occurs in specific cross-institutional and cultural contexts, involving and nurturing particular and different sensorial modalities. To think about ballet as a culture implies considering where it is rooted, how it is disseminated, who participates in the class, how dancers' relationships are organised (with the teacher and their peers), and which social and cultural codes they value (styles and pedagogic values the teachers and dancers share). In my study, I will not look at ballet pedagogy. My primary interest among all these aspects of the class, rather focuses on the dancer's embodied learning as a cultural process where senses are significant. Although all these aspects are important, in my study, I particularly focus on ways in which dancers in the selected

[19] There is a variety of teaching that is internationally known and still used in ballet classes in London. I explain the main characteristics briefly in Appendix K. For instance, methods by the Russian dancer and ballet teacher, Tamara Karsavina (1962), and by Italian dancer, mime, and pedagogue, Enrico Cecchetti (Guest and Bennett, 2007). Schools, such as the ones established by Russian ballet teacher and dancer Agrippina Vaganova (1969 [1946), by Irish-born British dancer, teacher, choreographer, and director, Ninette de Valois (Fay, 1997), and by Cuban dancer, teacher, choreographer, and director Alicia Alonso (Schwall, 2016), examination syllabus from the Royal Academy of Dance (RAD (1972[1916]), and technique style, such as by Russian dancer, choreographer and ballet teacher, George Balanchine (Schorer, 1999; Walczak and Kai, 2008).

[20] Examples from my study showed the dancers' varied educational backgrounds in ballet. For instance, two dancers who are Americans, Cira Robinson and Damien Johnson, were educated at the Dance Theatre of Harlem School in New York City, which follows the Balanchine/SAB style. One Brazilian, Fernanda de Oliveira was educated at The Royal Ballet School in London based on the system of training disseminated by Ninette de Valois. Another dancer, Jose Alves was educated at the Bolshoi School in Brazil which follows the Vaganova method.

institutions use their senses as a way of embodied learning in the ballet class. The investigation of the way dancers sense provides a means of democratising the ballet class.

1.2.1 A more democratic perspective of the ballet class

Morris (2003) notes that the ballet class is not only a way of thinking about movement, but also a social attitude which impacts the way a dancer processes all sorts of contextual information and value systems around it. For Morris (2003), there is a need in the professional ballet class for ballet teachers to acknowledge and incorporate the stylistic diversity from the works of different choreographers, instead of perfecting technical movements of a single method, school or style. According to Morris (2003: 17), the structure of the ballet class that prevails since the middle of the last century is 'almost entirely teacher-led and gives the student little opportunity for dialogue or dissension'. The dancing body is a site of negotiation in relations of resistance and self-surveillance with the members of the class. Philosopher Michel Foucault (1977:175) studied surveillance as a powerful means between members of a group to learn the norms of discipline and punishment in their engagement with an institution, in particular prisons, schools and hospitals. The relations of power occur through mechanisms of control, examination and classification of members (Foucault, 1977). In my study, dancers learn in their relations with the members of the ballet class, the norms and values through the surveillance of their senses.

Sociologist Anna Aalten (2004) analysed ballet dancers' physical-emotional sensations of strength, power and control in an ethnography of ballet as a cultural practice. For Aalten (2004), teachers, ballet masters[21], choreographers, and artistic directors teach dancers in class the ideal technique and body accepted in the ballet world, operating as gatekeepers to

[21] I use the term ballet master or ballet mistress in a particular manner to refer to the person who, as well as teaching, may work as a rehearsal assistant.

the profession. Based on Foucault's theory, dance scholar Jill Green (2002-03:110/111) scrutinised the qualities of the 'perfect body'[22] disseminated by such gatekeepers to dancers. According to Blasis (1830), many elements are part of the ballet classroom tradition as a regimented practice, for example, codified positions, structure of the class in barre and centre exercises, and use of the mirror. These elements can still be considered as core in the ballet classes investigated in London. Even in the past several decades, it can be observed that ballet technique remains resistant to change. My investigation of the ballet classroom in the twentieth-first-century partly aligns with the statement made by dance historian Sandra Noll Hammond (1984). Hammond's (1984:63) analysis of the early nineteenth-century ballet class retained some elements from the traditional class described by Blasis, 'while incorporating other material which is vastly different'.

Sports psychologist Sanna Nordin-Bates (2014) argues that the problem for dancers trying to fit an ideal body and perfect technical movements is that they create unrealistic expectations, which can lead to burnout and impact their motivation. Bringing such considerations into my study is important, given that the dancers learn norms about how to use their senses in particular ways through their social relations in class, engaging with a disciplinary process of their senses. These matters will be addressed more fully in Chapters 3, 4, and 5.

Although no studies consider the sensorium as a culturally-rooted deployment of senses in a professional ballet class, several studies provide useful leads for this investigation. Alterowitz (2015), as explained in the introduction of this thesis, examined and proposed a feminist or democratic ballet pedagogical approach which engages individual participants' learning styles and life experiences, and encourages experimentation and collaboration. For Alterowitz (2015:8), the classical ballet technique is commonly taught through teacher–student relationships characterised by 'authoritarian' practices which normalise aesthetic values,

[22] According to Green (2002-3:110/111), a definition of a dancer's 'perfect body' includes 'long', 'slender', 'super-flexible' and 'skinny' legs, with 'round', 'firm', 'small' buttocks, 'proportional to the skinny legs'. The stomach is 'hard' and 'flat', with almost 'no fat in the hips' displaying the bones. The waist should have a 'straight-line', arms with a 'small amount of muscle'. The face should be 'thin', with a clear bone structure, 'large' eyes and full 'heart-shaped' lips, with 'long' hair and the 'dancer should be light as a feather' (Green, 2002-3:110/111).

considering the 'ballet dancer as a docile subject'. In this context, Alterowitz interrogates ballet's traditional teaching methods, aiming to transform the twenty-first century ballet class into an environment that values dancers' engagement. I agree with Alterowitz's (2015:22) critique that the traditional and gendered assumptions of ballet technique, which is the foundation of the class, does not permit 'radical alterations'.

The notion of democracy in ballet is discussed through different perspectives. For former dancer and ballet teacher Julia Gleich (2015:10), an inclusive company model entails 'dancers of different shapes, sizes, and colours, and a varied repertory'. Gleich (2015:11) adds that 'teachers are asked to create a syllabus, in which they define their teaching practice within a fairly limited choice of extremes', for instance 'Vaganova or Cecchetti, RAD or Russian, Bournonville or Balanchine'. Gleich (2015:11/12) argues that a ballet class must offer 'the opportunity to discover and then expand beyond a common vocabulary to create dancers who can dance' varied styles and dance genres, instead of limiting ballet to labelled techniques. Gleich's (2015:12) premise is that dancers experience a series of energies and vectors in 'a collection of directions of movement, rather than shapes' in different technical and aesthetic approaches to ballet. Although they do not discuss specific senses, these studies by Morris (2003), Alterowitz (2015), and Gleich (2015) argue for another type of learning, one which involves a more democratic approach to the ballet class. Although these studies by Western scholars do not suggest a decolonial approach to ballet, they discuss the ballet class from a democratic perspective which inspired me to investigate the importance of the decolonialisation of dancers' senses. I propose that a more democratic and decolonial perspective of ballet learning can be achieved through the investigation of dancer's sensorial modalities.

According to philosopher and education scholar John Dewey (1922:115), 'education is a social process'. A democratically constituted society recognises 'mutual interests' between members of the group as 'a factor in social control' and can stimulate 'change in social habit' through continuous readjustments to new situations (Dewey, 1922:100). A society which provides participation of 'all its members in equal terms and which secures

readjustments of its institutions through interaction of different forms of associated life is in so far democratic' (Dewey, 1922:115). Brazilian philosopher Paulo Freire (1987[1970]:23), who represents Southern epistemologies, explains that to fight a culture of domination and violence, the 'oppressed' need a humanistic and liberating education which, first, awakes their perception of the domination they suffer, and second, transforms their being through a pedagogy which destroys the myths created by the 'oppressors'. According to Freire (1987[1970]), education as a practice of freedom is an interactive process, which must occur through dialogues to promote the expression, transformation, and creation of knowledge, as opposed to a pedagogy of the oppressed. The term 'democratic pedagogy' is used by dance scholars Becky Dyer (2009:119), Anne Brudrige (2012:38), and particularly in ballet by Alterowitz (2014:9). Democratic pedagogy uses a student-centred approach to empower the dancer to critically reflect and assume agency over their learning and their movements. In line with existing decolonial models in education and the ballet class, my study contributes to the scholarship by bringing attention to dancers' sensorial approaches. These sensorial means serve as a way to increase democratisation by integrating a holistic perspective into the daily ballet class.

Despite its evolution and studies on pedagogic democratisation in the field of ballet teaching, the ballet class still requires deeper attention to sensorial understanding. It needs to be scrutinised with regard to its socio-cultural context because it aims to prepare dancers to work in novel ways. It is important to point out that my study is not a historical investigation of ballet technique but an empirical investigation, through ethnographic methods, of how professional ballet dancers prioritise certain senses in some classes in London, and how this impacts their learning. Nonetheless, such contextualisation shows, for instance, that visuality is the ballet main sensorial avenue of communication and continues to go unquestioned.

1.2.2 Learning and embodying the ballet culture

The concept of *habitus,* conceived by sociologist Pierre Bourdieu (1988 [1979]: 170) as 'a structuring structure, which organises practices and the perception of practices' helps to elaborate on how ballet dancers sensorially learn and embody the ballet culture in class. Bourdieu (1988 [1979]) studied how individuals develop dispositions, attitudes and become themselves by engaging in everyday life practices, considering its sociological systems. For Bourdieu, practices are converted into motor schemes retained in the body, while the subject retains awareness of their social surroundings and subsequent memory experience. I use this concept to investigate how dancers' social relationships in the ballet class, as an institutional setting, affect their attitudes which are retained in their bodies. The *habitus* can alter according to the social habits of different ballet companies. Dancers internalise habits according to the values, aims and objectives of the cultural setting they work with. Yet, each dancer enters the company with some different ratio and familiarity of the ballet technique.

Within the world of ballet, there are different institutional settings which disseminate ballet technique. Each institution has particular values and beliefs, all of which affect the way dancers sense their embodiment in the daily class. Studies by anthropologist Helena Wulff (1998) and dance scholar Tamara Tomic-Vajagic (2012) are helpful to think about the cultural setting of an individual ballet company as a cultural and social space. These studies explore different value systems that affect the dancer's work, such as amounts of time spent on rehearsals and classes, and different styles of repertoire. Despite exploring aspects of particular repertory ballet companies as cultural sites of ballet production, these two studies did not focus on the dancers' sensorium in the classroom. Wulff (1998) observed the way some international repertory ballet companies work when they travel, train or perform through ethnographies of The Royal Ballet, Royal Swedish Ballet, American Ballet Theatre, and Ballet Frankfurt, yet she did not investigate the senses. Tomic-Vajagic (2012) focused on differences[23] between the choreographers' resident companies (such as Forsythe's or Balanchine's)

[23] For instance, companies that do not have one principal choreographer need ballet classes which prepare the dancers for a variety of choreographic styles. This is different from the specificity of choreographers' resident companies, such as Forsythe's or Balanchine's, in which their classes are oriented by the choreographer's style, as explored in Tomic-Vajagic's (2012) study.

versus international repertory companies (such as the New York City Ballet, The National Ballet of Canada, and The Royal Ballet). Tomic-Vajagic (2012) argues that the ballet technique serves as an example of the various types of individual dancers' background knowledge that creates a type of *habitus* from which they enter the same ballet company's standard activity (rehearsal, or a class). For Tomic-Vajagic, the dancer's '*habitus*' is a dynamic set of qualities and habits that an individual dancer develops through professional life, starting at school until the end of their career, which may include shifting between companies, dance institutions, and cultures. For example, dancers' habits are influenced by the structure of the working day, particular choreographic styles (for instance, a demand for improvisational ability), and their social relations with the hierarchical members of the company, such as the resident artistic director and, in some cases, the principal choreographer. Despite not investigating the senses, Tomic-Vajagic's (2012) study is relevant because it explores the influence of the combination of values, objectives, and aims set by the overall culture of the company on the dancer's internalised *habitus*.

In most international dancing companies, ballet dancers' activities are organised in ballet classes, rehearsals and performances. Yet, the dancers' experiences are unique and depend on their sensorial engagement with the social and cultural aspects of each ballet institution. Although focused on choreography, dance scholar Arabella Stanger's (2014) study is important to consider in my analysis of the professional ballet classes in London to investigate how its spatial organisation, that is dictated through ballet technique and history, is associated with the individual ballet dancer's *habitus* and their senses, regardless of their background. For Stanger (2014), the choreographic directions, intentions, dynamic and *kinesphere* can be shaped by socio-spatial principles to express a politicised aesthetic, an idealised vision of institutional political powers. Stanger (2014) analyses choreographic use of space in classical ballet by Marius Petipa and contemporary choreographers Merce Cunningham and William Forsythe. According to Stanger (2014:58), three principles of the dancer's bodily organisation

define the cultural aesthetics of classical ballet[24] aligned with politicised contexts of Renaissance courtly dancing, which are 'verticality and equilibrium in deportment, a squared orientation system; and a composite totality in movement coordination'. The social and spatial aspects of ballet technique inform the politicised way dancers embody organising principles. For Homans (2010), classical ballet technique represents nobility and etiquette of the European courts through anatomical geometry, such as symmetry and order, and a physical logic of the dancer's movements, as an aesthetic and way of life. The basis of the dancer's sensorium is constituted partly in relation to this balletic social space learnt in class. Therefore, the sensorium as a cultural constitution of the senses partly depends upon the dancer's *habitus*, but partly is driven to adapt to the standard ballet socio-spatial organisation that Stanger observed. This may bring additional pressures on the dancer when they sensorially learn ballet in class.

Whilst several studies engage with various elements of the ballet dancer's socio-culturally situated practice, the topic of professional ballet dancer's sensorial learning in class is under-explored. My research addresses this gap in scholarship by detailing the sensorial information acquired by professional ballet dancers in several daily classes, at different social and cultural contexts in London-based institutions, and how such elements inform the constitution of their sensorium to learn. Different cultural institutional settings create different training cultures. Even inside the same environment, the dancers learn differently through their senses, feelings and reasoning. To broaden understanding of ballet dancers' sensorium, it is important to explore some senses in detail to explain how they interconnect.

1.3 Sensorial stimuli of dancers in class

[24] The codification of these principles in the didactic texts established the technical foundations for a classical model of space. The ascendance of *ballet de cour* in the seventeenth century and *danse d'école* manuals, written by French and Italian teachers and choreographers from courts across Europe, characterised the spatial logic of ballet technique (Homans, 2010).

The complex structure of the ballet class involves a myriad of sensorial stimuli for the dancer in a succession of complex and dynamic sequences of movements danced to the music. Dance scholar Valerie Preston-Dunlop (1995) explains that dancers attend alternately to the bodily form (body design), to its relationship with the music, space and time, the physical force needed for moving, and the flow connecting the movements. For Preston-Dunlop (1995:166), a company class is 'the dancer's own time, to be used for physiological and psychological preparation, a cleansing; also, a time to experiment with expression and articulation'. Preston-Dunlop's (1995) study of the dancers' knowledge, showed the relevance of the dancer's internal and external perception to learn and move. Similarly, although not in a dance context, Vannini, Waskul and Gottschalk's (2010) study of the senses but not dance, suggests that people sense by attending to internal and external stimuli.

Dancers perceive stimuli in class, through their internal (breathing, balancing, heartbeat, sweating, moving, pain, pleasure) and external (listening, seeing, touching) sensorial modalities. Many of these sensorial means are considered fundamental parts of the dancer's learning. The variety of sensorial means the dancer engages with makes up the complex system, known as culturally-based sensorium. Nonetheless, each ballet dancer employs different sensorial means in diverse ways to learn in class. Although investigating contemporary professional dancers, neuroscientist David Kirsh (2011a:4) explains that each dancer's sensory system encodes different informative aspects of the world through different 'priming pathways'. To create novel movements, the dancer relies on one of these sensory modalities: 'imagery in the visual, somatosensory, tactile, motor systems', and emotions (Kirsh, 2011a:2-3). For Kirsh (2011a; 2011b), the dancers think with their bodies and senses to acquire and transmit knowledge, forming types of embodied cognition. The dancer's habits lead their sensory systems to 'expect' certain pathways, for instance, the somatosensory system (Kirsh, 2011a:4). In this case, a dancer may recognise graceful movements, yet what feels graceful through the somatosensory, may not always look graceful through the visual system.

In my research, dancers focus on external senses, training sight and aural skills to learn

a dance sequence associated with its musicality and dynamic. Marking, or performing a smaller version of a movement sequence (often just gesturing with the legs or hands), represents the dancer's mapping out of the full-out version of the phrase or step. It may be accompanied by words from ballet vocabulary or musical counts to facilitate such memorisation and revision. Although not focusing on ballet, Kirsh (2011b) explores the professional dancers' marking in rehearsals in Wayne McGregor's contemporary dance company. Kirsh (2011b) considers marking as an effective way for dancers to learn movements. In addition to paying attention to external senses, dance sociologist Helen Thomas and sociologist Jen Tarr (2009) discuss how ballet dancers concentrate on internal senses and sensations to cope with and ignore pain, and Pickard (2015) explores their feelings of pain and pleasure in class.

The way dancers are attuned to their senses influence the way they learn in the daily class, which may have a strong impact on their rehearsals and performances. Dancers experience constant change every day. Numerous factors affect the dancers' senses, for instance: how fatigued they are; the amount of sleep they have had; the temperature of the working space; what they ate the previous day; the particular daily/weekly workload; the repertoire they are working on; feelings from events in their personal lives, and the presence of work colleagues. Other factors can include their previous education, position in the institution (hierarchy) and the type of class. The intrinsic elements of the everyday involve the teacher's pedagogy, ballet method or school or style, the social relations with other dancers and members in class, live or recorded music, musical score and tempo, size and infrastructure of the studio, the time of the day, and the day of the week. For example, the dancers that have been longer in the institution may behave in ways that vary from the set norms. Experienced ballet dancers may do some steps of the sequences in class differently from what the teacher originally instructed, stop the class before it ends, stretch in between sequences instead of balancing at the end of the exercise, or keep on layers of clothes to warm themselves or for aesthetic reasons. Female dancers may do the centre on pointe shoes or stay in their flats. For this

reason, I investigate how the class, as a performative event, promotes internal and external stimuli influencing the dancers' feelings, behaviours and decision-making. Based on Roses-Thema's (2007) analysis of the impact of sensorial changes on professional contemporary dancers' performance, I propose that the 'ballet class' is a type of performance of the dancers for themselves, the teacher, and their peers.

This brief description demonstrates the complexity of the sensorial elements involved in professional dancers' learning in ballet class. As well as gathering information from the dancer's engagement with the class environment, senses and sensations are inputs for emotions. According to biologist and philosopher Francisco Varela (2005 [2000]) and neuroscientists Damasio and Gil Carvalho (2013), individuals feel their own bodily sensations, such as alterations in breathing and heart rate, in connection with emotions, for example, fear, anger, sadness, joy, shame, pride and admiration. Damasio and Carvalho (2013) state that people's perception of the environment or memory from external stimuli affects their decision-making.

As it is commonly practised, ballet is a non-linguistic bodily knowledge, which disseminates cultural values and norms to dancers through multifaceted sensorial experience. Dancers form their knowledge about the technique (how the movements and steps feel), artistry (how to apply expression) and the ballet's social and cultural setting (the rules of the class environment of the class, when to modify an exercise, how to behave and make decisions), all based on their senses. In my study, the concept of sensorium serves to investigate which senses and how these are felt by dancers in the context of London-based professional ballet classes. Sensorium offers a varied cultural interpretation of the dancer's sensorial modalities in specific contexts. For this reason, in what follows, I briefly discuss studies on the multiple ways dancer's use and feel their senses in class, although they do not explore their sensorium.

1.3.1 Vision

In my study, professional ballet dancers used their vision in multiple ways. Dancers watch the teacher's demonstrations, survey their movement in the mirror, look directly at their bodies, and observe their peers. Furthermore, dancers use their vision to locate themselves in space (to distance, anchor and move on-stage or in the studio, fix points, such as the front, back, left, right, and diagonally, and spot to turn – *pirouettes*). To understand how this informs part of their multisensorial learning it is important to define the difference between the terms of vision and visuality regarding their cultural significance. For the social-philosopher Gillian Rosemary Rose (2001:6), vision is 'what the human eye is physiologically capable of seeing'. However, the term 'visuality' refers to the ways vision is socially constructed, such as how individuals make sense of the world through seeing or unseeing.

Even though some ballet manuals were created nearly 200 years ago, some ballet dancers in my study were seen in classes still following similar ballet instructions. For example, some ballet manuals[25] in the tradition of ballet pedagogy and related historical literature suggest the direction in which dancers should position their eyes during *enchaînements*. In each of their time periods, these ballet teachers suggested ways dancers should use their eye-body movement coordination in ballet technique. Some dancers I investigated directed their gaze in class exercises following Blasis' (1830:65) premise that the 'head, shoulders and bust, ought to be supported and adorned by the dancer's arms and so precisely follow their motions'. In Blasis' (1830:72) approach, the dancer's eye movement 'cast up or downwards or straight forwards', followed the movements of their arms to add expression to the whole body. Dance researchers Ann Hutchinson Guest and Toby Bennett (2007) explain how Blasis taught Cecchetti, who later created his own ballet method. Cecchetti's ballet method was still taught in some of the classes in London, such as DW and BB.

Dancers also use their vision to look at the mirror as a self-surveillance device to support disciplinary norms, a notion which aligns with Foucault's (1977) theory. Dancers started

[25] Ballet manuals by Italian ballet teacher, dancer and choreographer Carlo Blasis (1830), Russian ballet teacher and dancer Agrippina Vaganova (1969 [1946]), Italian dancer, mime, and pedagogue Enrico Cecchetti (Guest and Bennett, 2007), and specific study, such as by English artistic director, ballet choreographer, dancer and ballet teacher Anne Woolliams (1978) explain how dancers should use their eyes in the exercises in class.

to use the mirror in class approximately in the eighteenth century (Foster, 1997). The mirror has a two-fold impact on ballet dancers' senses. When the mirror is used as a learning tool in ballet class it has a positive effect because it offers instant visual feedback on the dancers' alignment, enabling self-correction of a position, line or movement. Dance scholar Shantel Ehrenberg (2010:175) investigates the use of the mirror in ballet, modern technique, and jazz classes by a small group of female dance students in a university environment. Ehrenberg (2010) found that dancers see their visual image in the mirror and, at the same time, are affected by the kinaesthetic awareness of their bodies. The dancers in Ehrenberg's (2010:175) research aligned their movements by looking at their positions in the mirror 'in a cyclical action-reaction pattern, thus this process was termed the dancer–mirror feedback loop'. In this process, the dancers looked at the image in the mirror, felt an incorrect alignment, made adjustments, looked at the image again, and re-felt the correction (Ehrenberg, 2010).

From a different perspective, the mirror has a negative effect when it is used to compare the dancers' reflected image with an ideal image of a step or movement. Dance researcher Sally Radell's (2013) study with ballet students reveals they were sometimes over-critical of themselves when looking at their images in the mirror and losing focus on their kinaesthetic feeling. The notion of body image was defined by sociologist Mike Featherstone (2010:194) as a visual 'mirror-image mode', a 'mental image of one's body as it appears to others'. This notion is important in my study because ballet dancers may over-criticise themselves based on the comparison of how they want to appear to others and the image they see in the mirror. The epistemologies of the South, in particular the notion of deep sensing can contribute to the discussion on how dancers' use their sight related to cultural values they learn in class, which impact other senses, their emotions, and movements. I investigate the ways professional ballet dancers use their visuality in Chapter 4, something that is not explored in the literature considering the dancer's sensorium and learning.

1.3.2 Touch

Touch is another important sense employed by professional ballet dancers in varied ways in the class. Dancers touch themselves for proprioceptive awareness, pain relief or tension. They press and feel their bodyweight by touching the floor with their feet. They touch objects, such as the barre to find alignment and balance, props to warm up, and their skin touches their dance clothes and shoes. Interdisciplinary scholars discuss touch as a means of learning and perceiving the world. The dancers' touch or being touched imply contact with a person or an object through the skin, trespassing the boundaries of their *kinesphere*. Touch is perceived by sensory nerve endings distributed all over the dancers' skin, allowing them to differentiate between various types of touch. According to dance scholars Donna Krasnow and Virginia Wilmerding's (2015:126) study about motor learning in different dance techniques, including ballet, the human skin has cutaneous receptors which inform us about 'touch, pressure and pain'. The areas of the body with the 'highest numbers of cutaneous receptors are the fingertips, the palms of the hands, and soles of the feet' (Krasnow and Wilmerding, 2015:126). Dancers engage with 'discriminative touch, pain and temperature, and proprioception' while dancing, forming their 'somatosensory system' (Krasnow and Wilmerding, 2015:126). To experience the environment, dancers need to feel through sensory modalities, affecting their movement execution.

Although looking through the lens of history and anthropology, Classen (2005) constructs a multifaceted cultural history of touch, as a sense that implies breaking boundaries of the body by contact, discriminating what is outside one's own body. Classen (2012) also explores the socialisation of a variety of tactile dimensions. Classen (2005; 2012) exemplified the tactile sense in different cultures as a means of pain, affect, pleasure, and bonds between humans and animals, and sports and consumerism. I follow this notion to broaden understanding about the various ways dancers experience touch in their social interactions in class to discipline their bodies in an English cultural context.

With a focus on a contemporary dance class, social scientist Jaana Parviainen (2002: 11)

explores the dancer's bodily knowledge based on their tactile-kinaesthetic sense and reflectivity, as 'knowing in and through the body'. Parviainen (2002) suggests that dance students learn skills using a declarative knowledge through instruction, incorporation of rules and attention to their movements. At an expert level, these elements become unnecessary to the dancers' practice of those skills (Parviainen, 2002:22). I challenge Parviainen's (2002) statement as, in my study, professional ballet dancers polished their movements continuously through this type of declarative knowledge.

From a psycho-physiological perspective, sociologist Mark Paterson (2007:3) defined the relationship between the cutaneous touch, proprioception, kinaesthesia and the vestibular sense, as 'haptic'. For Paterson (2009:130), tactility is associated 'with temperature (thermoreceptors), pain (nociceptors) and position (proprioceptors) as with straightforward pressure (mechanoreceptors)'. Cutaneous means 'the skin itself' as a 'sense organ'. Vestibular means the 'information obtained from semi-circular canals in the inner ear', enabling the perception of balance, head position, acceleration and deceleration (Paterson, 2007:4). Paterson (2009:131) states that tactility provides a 'range of information concerning temperature, pressure, pain and texture, always mediated through the organ that contains these receptors, the skin'. This complex concept of haptic also relates to Santos' (2018) idea of deep sensing. For this reason, I consider touch as a source of physical information, which enables the identification of the sensation of pressure, pain, temperature, proprioception, and vestibular sense, linked with emotions.

Although researching Japanese dance rather than ballet, ethnomusicologist and dancer Tomie Hahn (2007:110) proposes that dancers (as receiver) receive the tactile information, accept and appreciate it as an 'active engagement' from the touch of the teacher (as transmitter). For dance researcher David Outevsky (2013:2), a positive touch, known as 'hands-on feedback', plays a vital role in learning and teaching. In order to understand the pedagogic touch, active engagement is needed from the dancer. However, I consider touch as a political gesture in class because touch involves power relationships. Although not in a ballet context,

philosopher Erin Manning (2006:9) considers touch as a 'political gesture' geared toward 'an other to whom I have decided to expose myself, skin to skin'. Aligned with this idea, Hahn (2007:102) explains touch as political when it serves as a means of 'flow and control' in power relationships between dancers and teachers. Flow is apparent in the physical sense and in the sense of inner, contemplative energy (Hahn, 2007). In Japanese dance the movement can derive from the core centre in the abdomen, 'where the body energy and spiritual centre resides', and the connection of the body's 'energy to the earth is via tactile contact with the soles of the feet' (Hahn, 2007:62-63).

In ballet manuals, the sense of touch appears mostly related to the teacher's correction of the dancers in ballet class with the intent to influence their proprioception, as explained by ballet dancer and teacher Gretchen Warren (1996:33) and also ballet master Eric Assandri (2019). Nevertheless, most studies of touch in ballet class investigate its use by the teachers, disregarding the dancers' perspective of tactility. Touch elicits a two-fold perception of what is external and internal to the dancers' bodies. Yet, touch is not explored in relation to the ballet dancer's sensorium. Dancers' tactility in ballet class will be explored in Chapter 3.

1.3.3 Aural sense: listening in the class

The sense of hearing can serve many purposes for ballet dancers, including preparation for artistry in performance. Hearing is one of the most clearly acknowledged senses in ballet literature. For instance, for former New York City Ballet dancers Suzanne Farrell (2002), Toni Bentley (1982), Suki Schorer (1999), Barbara Walczak and Una Kai (2008), George Balanchine's daily company class prioritised enhanced listening as the main sensorial stimuli. In ballet class, dancers need to feel and execute each step following the exact musical tempo given by the teacher. Musician Katherine Teck (1993) offered practical explorations

for dancers to improve the relationship between their sense of hearing the music and expressing movements through their technique. In her work though, Teck disregarded other ways dancers use their aural sense which impacts their learning.

The dancers' musicality relates to their movement execution through the sense of its phrases, changes in dynamics, instrumentation, modes of accentuation, or harmony. Dance and music researcher Kyoko Murakami (2005) argues that different musical qualities in music accompaniment also affect the dancers in ballet class, such as more pulse from the piano's qualities. Furthermore, the dancers listen to the spoken language of their teacher's and peers' voices, and also hear silence.

Studies by Stephanie Jordan (2000), and music scholars Isabel Martínez and Juliette Epele (2009) explored the dancers' musical interpretation and their movement in ballet choreographies. According to these studies, dancers expressed different movements by synchronising or moving in opposition with the sensations produced by the music. Based on ballet choreographers' relationship with the music, such as George Balanchine, Frederick Ashton and Antony Tudor, Jordan (2000) identified musical-choreograph dynamic qualities of the dancers in ballet class. For instance, when dancers turn abruptly, pause, balance, undulate, extend a movement, accelerate, change the rhythm, hesitate, change direction, retrograde, and express other musical gestures. For philosopher Noel Carroll and historian Margaret Moore (2010), dancers perceive different sensations from the music to perform movements. Despite their contributions, these studies disregard other ways dancers use their aural sense. For instance, in my study, dancers discuss their aural memories of the teacher's voice in their minds making corrections emphasising a musical accent. All these types of hearing impact the dancer's learning in class.

According to scholar of sound studies Michael Bull and sociologist Les Back (2003), people from diverse social groups sense sounds in different ways. For Bull and Les Back (2003), deep listening means reflecting on how sound makes people find significance in their social experience, such as discerning between multiple layers of meaning in the same sound.

I will use this rationale of exploring multiple layers of sensing, to discuss different sensorial modalities. Based on my findings, the dancer's aural sense permeates other senses. In this study, I will not dedicate a discrete chapter to it, however listening is considered integral to and interwoven with other senses. For instance, in Chapter 5, I explore how hearing is associated with the dancers' use of breath in class.

1.3.4 Breathing: an under-explored sensorial modality

Although frequently discussed in somatic techniques, such as Pilates, and acknowledged in ballet technique studies, to date, no scholars have considered breath as a sense, or as part of the dancer's sensorium. To think about decolonising the senses means to expand the notion of sense associated only with its information from a sense organ. Although not investigating ballet, neuroscientist Antonio Damasio (1999) explains that breathing forms a perceptual part of the interoceptive dimension of the body, which merges in synergy with exteroception and proprioception forming feelings. Inspired by Damasio's (1999) study, I consider the dancers' breathing as a means to perceive their own bodily sensations and emotions. Similarly, neuroscientist Julia Christensen, and psychologists Sebastian Gaigg and Beatriz Calvo-Merino (2017) found that professional ballet dancers enhance their self-awareness of signals arising from within the body (interoceptive accuracy) in class. The dancers need to pay attention to internal bodily signals, such as heartbeat, sweat response, and muscle contraction, including breathing.

Breathing constantly informs dancers of what is going on inside the body in relation to the environment. Moreover, the dancers express emotions in class and develop skills to identify emotions expressed by others, becoming more responsive to their affective movement. Christensen, Gaigg and Calvo-Merino's (2017:9) discuss the dancers' perception of internal bodily signals/states (such as heartbeat) and the 'use of these signals for the expression of states and emotions' (intentions) through the body. Their rationale can be transposed in my

study to consider the internal state of breathing, as part of the professional ballet dancer's sensorium. My findings indicate that dancers' breathing is a sensorial means of gathering information, expressing rhythm, feeling emotions and learning in the environment of the ballet class. Both Damasio's (1999) and Christensen, Gaigg and Calvo-Merino's (2017) studies help to support my argument that breathing is a perceptual sensorial modality, which offers information about the interoceptive, exteroceptive and proprioceptive dimensions of the body.

The dancers' ways of breathing (feeling out of breath, breathing to calm them down, and gathering energy to move) can help or hinder the execution of movements and use of musicality in class. According to Parviainen (2010:172), dancers experience the quality of movement through focused awareness, breath, kinaesthesia, and perception. The dancers 'spend a great deal of energy remembering the sequences of movements rationally' focusing on alignment and shaping movement (Parviainen, 2010:171). Yet, breathing is a culturally framed sensorial modality, under-explored with respect to the professional ballet dancer.

The physiology of breathing comprises a proprioceptive sensation of the dancer's maximal inspiration (breathing air in) with the position of the chest being enlarged through intercostal muscles (expanding the chest wall and the lungs) and diaphragm (contracting). Physician Kenneth Backhouse (2018) explains that in the act of expiration (breathing/air out) the pressure of the air into the lungs is reduced and the intercostal muscles and diaphragm return to their initial positions. According to health scientist Detlef Heck and his colleagues (2017), the process of respiration occurs via multiple sensory pathways, contributing to a rhythmic component of the body and it is driven by proprioceptive and interoceptive inputs. From another perspective, Potter (2007:21) suggests that the dancer's movement 'has inherent rhythm', which 'may (but not 'must') be reflected through the dancers' breathing'.

Basic physiological survival depends critically on the regulation of breathing. The controlled use of breathing influences movement execution of bodily techniques. This has been observed, for example, in the training of musicians, singers and athletes. Engineer Yutaka Sakaguchi and art performer Aiba Eriko (2016) studied the importance of breathing

for musicians to maintain the timing of the music. The musicians' focus on the physical aspects, such as the rhythm of breathing helped them succeed in complex performances. Another study, with diverse athletes, such as swimmers, runners, cyclists, rowers and divers by psychologist Christopher Eccleston (2016) found that need athletes' awareness and control of respiration is necessary as part of their technique in daily training as these sports involve high levels of cardiopulmonary challenge. Even though ballet dancers work differently from musicians, singers and athletes, they all train daily techniques to enhance movement.

Whilst not focusing on the senses, sociologists Steven Wainwright, Clare Williams and Bryan Turner (2005: 49) investigate The Royal Ballet professional ballet dancers' addictive embodiment of a balletic physicality 'of feeling exhausted, sweaty and out of breath'. Dance teacher and researcher Claudine Anderson (2016), sports scientist Isabela Martins Rodrigues et al. (2016), and kinesiologist-scholar Nancy Romita and teacher-dancer Allegra Romita (2016) have explored different elements of dancers' breathing patterns. For Russian dancer and ballet teacher Karsavina (1962), whose ballet manual from the mid-twentieth century is still considered relevant today, breathing is central to musicality (RAD, 2020). Breath appears briefly in ballet manuals associated with other senses (Karsavina, 1962; De Valois, 1977; Bentley, 1982). In the literature, most ballet teachers consider isolated senses but do not explore how these stimuli might work in tandem to help the dancers' multisensorial learning (Vaganova, 1969 [1946]; Guest and Bennett, 2007; De Valois, 1977) with rare exceptions (Karsavina, 1962:16; Warren, 1996:31-33; Anderson, 2016).

Sports scientists Josianne Rodrigues-Krause et al. (2015:91), suggest that ballet dancers need to be 'technically skilled' and 'well-conditioned', but the structure of the ballet class does not provide breathing skills to enable the dancers to be fit enough for performances. Dancers may focus their attention on their breathing to optimise their performance outcome. This decision-making process of personalised strategies can come from a 'repertoire of images' of past experiences to face the situation (Damasio, 1994:170). Sociologist David D. Franks (2006) points out that people's unconscious preferences and emotional states exert

significantly more influence over their thoughts and behaviours than conscious ones. Whether conscious or not, I investigate how breathing and their associated emotions impact the dancers' decision-making and learning. This idea of the interconnectedness of emotions, reasons and senses was explored by Santos (2018) through the concept of *corazonar*. This concept has not yet been studied in the literature from the perspective of professional ballet dancers' experiences in class. In Chapter 5, I explore the dancers' breath in detail.

1.3.5 Kinaesthesia: a sensorial modality permeating all others in ballet

In the endeavour of excellence in class, ballet dancers are aware, and focus attention on proprioceptive sensations. The difference between the terms kinaesthesia and proprioception is explained in dance scholarship. Foster (2011:7) defines kinaesthesia as the individual bodily experience of spatial awareness, a personal feeling of one's own body related to physical experience and a socially constructed concept. The term proprioception originated from Henry Charlton Bastian in 1880 and influenced psychologists and dance educators in the early twentieth century (Foster, 2011). In the field of medicine, kinaesthesia was replaced by the term proprioception, which refers to an internal sense of the body's physical organisation (with variations between peoples and cultures) (Foster, 2011:7). Sklar (2000:3) explains that the dancers' kinaesthetic experiences are private internal experiences, and yet, they are 'simultaneously affected and shaped by outside contextual factors'. For Damasio (1994:152), proprioception is the 'awareness of movements' and the position of the body in space and time due to sensory information on states of coordination.

The term proprioception is studied with different perspectives. Philosopher Barbara Gail Montero's (2006) study on proprioception investigates how dancers acquire information about the positions and movements of their bodies, via receptors in the skin, joints, tendons, ligaments, and muscles. Similarly, health scientist Glenna Batson (2008) defines proprioception as the dancer's acknowledgement of movements. Roses-Thema (2007:133)

adds that the dancers' customised perception of the environment through their 'anatomical differences' constitutes their proprioception. Potter (2008:453), further elaborates on the notion of proprioception by noting an internal connection, the 'sense of self' of the dancer.

When analysing the role of kinaesthesia in dance performances, studies by Krasnow (1994) and Krasnow and Wilmerding (2015) discuss the lack of agreement between scholars about the notion of kinaesthesia and how it is felt by dancers. Moreover, dance researcher Rachel Barlow's (2018) review of the last twenty-five years of the study of proprioception in dance, points out the lack of consistency between studies about the term proprioception and how it is used. This overview of the sensorial modalities named kinaesthesia and proprioception shows that the constitution, function and classification of the bodily senses vary among different fields. For the purpose of my study, I will use the term kinaesthesia based on Foster's (2011) and Sklar's (2000) notion of the dancer's physical experience and private feeling of spatial awareness whilst dancing.

Professional ballet dancers know how to move and how it feels kinaesthetically, depending little on sight to execute movements. During their careers, ballet dancers develop an awareness of this internal sensuous knowledge of kinaesthesia, to refine their movements and apply artistry. In ballet class dancers monitor the information from inward sensations to guide their decisions when they have to stop, accelerate, or add strength to a movement, based on how overheated, out of breath, or how much pain they feel. A study of contemporary dancers, by dance and theatre scholar Laura Haughey (2013), explains how they develop enhanced sensory awareness in class. According to Haughey, the dancer's sensory awareness can be a powerful agent for change of abilities and habits that enable movement.

Although studying elite athletes, sports scientist John Toner, Montero and psychologist Aidan Moran (2016:10) argue that 'focus of attention involves a reflective level of bodily awareness as the performer attends to movement execution'. Dancers' awareness and perception of their kinaesthetic sensorial experiences differ. According to Ravn (2016:3), the dancer's 'expertise entails active involvement in embodied explorations of what might be

optimised, modified and changed in the way they move and sense their bodies'. In my study, kinaesthesia appears to be linked with the other sensorial modalities whilst learning ballet. For this reason, I explore this together with other sensorial modalities.

Other studies have focused on additional sensorial modalities. Journalist Katy Young (2013) explored the professional dancers' sense of smell in ballet classes at the English National Ballet and Eccleston (2016) investigated amateur ballet dancers' balance. Based on the review of multidisciplinary studies in this chapter, there is a lack of studies focused on the formation of professional ballet dancers' sensorium whilst learning in ballet class. To understand the development of the sensorium better, I consider it relevant to expand the notion of the five senses and recognise other sensorial modalities. I selected the sensorial modalities of vision, touch, and breathing as these were the most discussed by the participants to explain their multiple ways of learning. In Chapters 3, 4 and 5, I exemplify multiple ways the dancers feel some sensorial modalities interconnected with others and how this varies depending on their engagement with the environment. The dancers' senses are socialised differently in the space of the class and their multiple types of sensorial modalities are associated with emotions and reasoning processes, impacting their learning. In Chapter 6, I advocate for a broader understanding of the dancers' senses as a means of learning and a more sensorial approach to the ballet class.

1.4 Multisensorial learning

In this thesis, I consider the term 'multisensory' as a person's experience of one sensory modality influenced by another, following physiologist Gemma Calvert, psychologist Charles Spence and neurobiologist Barry E. Stein (2004) and Stein (2012:3). Calvert, Spence and Stein's (2004) study focuses on how the brain deals congruently with information from different sensorial modalities. Although not studying ballet, psychologists Ladan Shams and Robyn Kim (2012:478) use the term 'multisensory learning' in their statistical study to test

multisensorial associations in adults, in particular between the senses of vision and audition. Nevertheless, none of these studies consider the social and cultural context of the sensorial experience that I explore in this thesis.

Dance anthropologist Judith Lynne Hanna's (2008:492) study of dance programmes in the school education system argues that 'dance is multisensory'. In Hanna's (2008:492) words 'there is the sight of dancers moving in time and space; the sound of physical movement, breathing, accompanying music and talk; the smell of dancers' physical exertion; the tactile sensation of body parts touching the ground, other body parts, people or props, and the air around the dancers; the proxemics sense of distance among dancers and between dancers and audience; and the kinaesthetic experience and sense of empathy with a performer's bodily movement and energy'. Nevertheless, Hanna (2008) points out the notion of dance as multisensory focused on its cognitive, linguistic, and neurological dimensions to argue for the importance of movement and nonverbal communication in education. Hanna's (2008) study, however, does not explore how dancer's multisensoriality occurs in detail.

In a different context, literary theorist Piet Devos (2018:7) argues that 'one perceptual modality – such as a tactile impression – can be transposed into another modality, such as a proprioceptive interpretation', resulting in a haptic experience. Devos' (2018) auto-ethnographic research explores the functions of the skin as a multisensory organ of blind people and contemporary dancers. Devos (2018) found that the dancers' located themselves – by calculating distances and feeling the presence of others in space through tactile (skin) and auditory cues when their vision was restricted. Thus, the enhancement of particular senses enabled the dancers to move together, even when they could not see each other. Although not mentioning multisensoriality, scientist Tone Pernille Østern and dance artist Ellen Øyen's (2015:126) study of choreographic practices explore the sensations of weight through touch

constituting an embodied transformative learning. Østern and Øyen (2015) focused on inclusivity[26] of different dancing bodies, for instance integrating dancers considered with disabilities. In another study of dancers' multisensoriality, sports scientist Marian Runyeon Hyler (1988:6) focused on properties of the tactile sense, for example, 'touch-related sensations' with a 'kinaesthetic perceptual system' in dance learning.

The daily class requires the dancer's constant movement through sensorial, cognitive and emotional responses in a professional context. Anthropologist Nadia Seremetakis (1994:28) states 'the memory of one sense is stored in another, thus, to be awake is remembering through the senses'. Seremetakis studied memory as a culturally mediated practice activated by embodied acts and objects. In my study, dancers repeat movements, forming a memory of such executions. In this process, dancers perceive through their senses, use imagery, think about their movements, recall memory, and feel emotional states to learn ballet technique and apply artistry.

I was inspired by psychological anthropologist Thomas Csordas (1993) notion of perception, as a culturally embedded embodied process. Csordas (1993:5) defines the term 'somatic modes of attention' as a conscious bodily and multisensory engagement of oneself through perception, intuition, imagination, and sensation. In addition, Santos' (2018) notion of 'knowing-with' helped me to consider modes of attending to the body as part of the learning process in multiple ways, including the senses.

Apart from defining which senses people use in a particular culture, it is important to note that the same sensoria can be used differently across various cultures. People sense and make sense of their cultures differently, in terms of using their senses and the symbolic meanings they give to them. Design anthropologist Sarah Pink (2009:131) explains that 'people inhabit multisensory environments, places, in which themselves are constantly being remade'. An example of the dancer's multisensoriality is the study by dance anthropologist Yolanda

[26] The term inclusivity refers to inclusion of different bodies in dance. This is related to the term neurodiversity developed by sociologist Judy Singer (2017) in 1999 to consider civil rights plea for people with autism. Drawn from the concept of biodiversity, in Singer's (2017) perspective, minorities should be treated with dignity and acceptance. These terms consider inclusive ways of thinking about the planet and its communities.

van Ede (2014) of Japanese female dancers and teachers who applied a different sensory model in their modes of transmission and learning Spanish flamenco. The Japanese dancers created a particular style related to the quality of sound in class, by stomping the floor with their feet, prioritising the sense of hearing, the loud volume over musicality, as a form of cultural expression. This 'Japanese' flamenco dance style offered these women a stage for resisting against local Japanese norms of patriarchal society, of female cosmopolitanism against male traditionalism in a tight hierarchical, organisational structure which considers proper female behaviour to act as invisible and as inaudible as possible. For van Ede (2014), dance genres taught globally require localised and distinct styles. Modelled on van Ede's approach, in Chapters 3, 4, and 5 I analyse different professional ballet classes in London and their relation to the dancer's multisensorial learning.

Each individual uses their senses differently. A variety of studies have already identified that there is the potential to expand multisensorial modalities beyond Aristotle's model of five senses. Based on this premise, in my thesis I analyse the dancers different use of their senses in learning in specific ballet classes. As explained in the introduction, the core concepts that comprise the framework of my study are:

(1) the sensorium of the dancer, which informs multisensorial learning (Howes, 2003:6; Howes and Classen, 2014:13);

(2) decolonial sensing, particularly the notion of *corazonar*, developed by Santos (2018, 100-101), which unites reason, emotions, and deep sensing;

(3) democratisation of ballet class, towards a nonauthoritarian ballet teaching, proposed by Alterowitz (2014:9).

The concepts of sensorium and decolonial sensing will promote the democratisation of the senses in the ballet class. Alterowitz (2014) already proposed the pedagogic principles that lead to a more democratic pedagogy. In this thesis, I am not exploring pedagogy, rather I am interested in the ways in which the expanded use of senses can promote an equally democratic intervention. The literature reviewed in this chapter of the dancers' sensorium and

their ways of learning serves as basis to connect with the core concepts of my framework and promote a decolonising perspective to democratise the ballet class.

1.5 Summary of Chapter 1

Much of the dancers' career spent in class requires them to focus attention on some senses in detriment of others. Ballet learning involves mechanisms of discipline of the dancers' senses. Dancers need to be aware of themselves and other dancers' presence, give intent and often express emotional states, whilst engaging with a bodily memory from repetition and reasoning of ways of doing the movements in the music.

The literature reviewed in this chapter helps me to consider that bodies are different, they respond distinctly to the environment, and the same sense can be felt in disparate ways depending on the person and situation. In my thesis, professional ballet dancers use and feel multiple and interconnected senses in their learning in ballet class. For this reason, the notion of the five senses is limited to analyse which senses dancers feel and how they relate to their learning. The studies reviewed in this chapter support the framework that I proposed in the introduction of this thesis. To investigate the development of expertise of professional ballet dancers, I was inspired by the concepts of sensorium (Howes, 2003:6; Howes and Classen, 2014:13), decolonisation of the senses through the notions of *corazonar* and deep sensing (Santos, 2018, 100-101), and the idea of democratisation of ballet pedagogy (Alterowitz 2014).

From the overview of existing literature, it is clear that dancers engage with a range of complex and dynamic sequences of movements and steps in ballet class through their senses. Dancers listen to the music, hear the teacher's words explaining the sequences and feedback. They also use their senses when they see themselves in the mirror, touch objects, sweat, feel their body temperature, the heartbeat, the pressure of the weight against gravity and sense the presence of other dancers. However, dancers perceive and learn differently and

individually, from a distinctive *habitus*. These elements influence the dancers' perception, memory, imagery, and emotions in the class and their sensorium.

In this chapter, section 1.1 explored the notion of decolonisation of the dancer's senses and democratisation of the ballet class. Section 1.2 explained the dancer's sensorial learning whilst embodying the ballet culture. Following this, section 1.3 described the myriad of sensorial stimuli for the dancers in class, and section 1.4 discussed the dancer's multisensorial learning. The professional ballet class is a practice situated in a specific socio-cultural setting, and a place of embodied learning, involving mostly tacit information gathered through the dancer's sensorial means. My study investigates the dancer's network of interconnected bodily senses through a broader perspective of analysis, one that considers the dancers' learning as a result of their sensing, feeling and thinking. The dancer's deep sensing are ways of knowing inscribed in their social relations. A broader perspective of ballet dancers' sensorial modalities and their sensorium in different ballet classes helps to understand how to decolonise their senses and democratise their learning of the technique and artistry. In the next chapter, I introduce the ethnographic methodological framework and discuss the three ballet institutions and the participants in this research.

Chapter 2 – Aspects of ethnographic method in London

In this chapter, I place the dance companies, the independent studio and the participants (professional ballet dancers) of this research within the context of the professional ballet classes in London. In line with the discussion in the previous chapter, classes across the three selected institutions are viewed as specific socio-cultural spaces in which multisensorial learning occurs. I discuss how the ethnographic methods may help to reveal how professional dancers learn through the interconnectedness of multiple sensorial modalities in their engagement with social and cultural elements in the ballet class. The recognition of the dancers' sensorial modalities, as a construction of the multifaceted sensoria, may contribute to the development of a more egalitarian, and ultimately decolonised, use of their senses in the process of learning in the ballet class.

As discussed in the introduction of this thesis, the ballet class is a means to refine professional dancers' technique. At the professional level, dancers learn complex and choreographed sequences to elaborate music tempi. The dancers' nuanced movements are also associated with their artistic skills[27]. This preparation of the dancers' technique and artistry in the (typically morning) daily class thus serves to be applied later in the day in specific stylistic repertoire rehearsals and in performances. For this reason, the ballet class is the opening activity and can assist dancers to establish connections between the choreographies they will perform. Principal dancer with RB and teacher with DW, Roberta Marquez (interview, 22.02.2017) notes, that no matter which role you will perform, 'every day you will do a *plié*'. However, it is important to state that variations exist, and the daily ballet class occasionally includes particular emphasis on stylistic or movement execution aspects. Many social and cultural elements of the ballet class affect the way dancers learn and embody the movement. For example, as discussed in the introduction and Chapter 1, varied aspects affect the dancers'

[27] Morris (2008:43) discusses the notion of artistry in ballet based on the dancers 'expression and their 'feelings' and argues that artistry cannot be dissociated from the technique. Moreover, the 'notions of placing and technical accuracy are variable 'according to a different set of values and notions of body organisation and approach to ballet vocabulary (Morris, 2008:45).

senses, such as their background, their social relations, the rules and beliefs transmitted in class, the class space and time, their use of gendered movements, their position in the institution's hierarchy, and the differences in teaching (the teacher's training, ballet method or school, style, or teaching experience).

In my study, the ballet class is thus understood as a social and cultural space where dancers sense, think and feel. Dancers bring unique responses to the aesthetic and physical prompts from the teacher, whilst embodying the movements and steps proposed. The technique, then, is the integral fibre of the social and cultural environment of the class. As already determined in section 1.4, professional ballet dancers' focus of attention, memory, imagery, and emotional states influence their behaviour, actions, and the formation of their sensorium in learning. Three concepts are key to this thesis in London ballet institutions. The ethnographic methods outlined in this chapter helped me to explore the three key ideas of this thesis: (1) that sensorium, as defined by Howes and Classen (2014), is affected by the person's experience and application of their sensorial modalities within a given cultural space; (2) that people, in social relations, engage with affective ways of knowing which differ in terms of their culture, following Santos' (2018:100-101) conceptualisation of *corazonar*; and, (3) that acknowledging the sensorial aspects opens up the way to the democratisation of ballet, contributing to the concept articulated by Alterowitz (2014:9). In Chapter 6, I discuss how these conceptual terms further lead to the decolonisation of the dancers' senses in the ballet classes in London.

2.1 The setting: London as one of the major ballet centres

Learning and dancing ballet professionally in London in the twenty-first century is interesting to consider because the city attracts international dancers and teachers with different depths of ballet education and professional experience. These dancers interpret, learn, and embody the elements characteristic of the ballet technique based on the values

learnt from the cultures that formed their individual experiences. This includes the practical knowledge of previous classes (ballet education and professional experience in different countries). I chose London because it is a large, multi-ethnic and racially diverse European metropolis with a myriad of cultural spaces. London also has a long ballet tradition and different types of related institutions. London has developed particular ballet organisations with varied size and mission, based on different schools, methods and systems of training (see Appendix K for a brief description of the methods, schools, and styles used in the classes investigated).

The three professional ballet institutions investigated have individual settings, with great specificity of elements constituting particular ballet class cultures. However, all the investigated ballet classes have the premise of training professional dancers for strength and stamina and serve as a preparation for their daily activities. Although the ballet class structure is formed by constant features of combinations of movements (at the barre and centre, *adage, petit/grand allegro*) consistent throughout most of the world, it is codified with some changes in the steps and positions in the combinations/*enchaînements*. The codification of ballet relates to the process of forming a code of the technical approach and varies depending on the method. Yet, the pace (how movements are organised in the musical tempo), choice of movements and steps in the *enchaînements* vary according to each teacher's approach (way of delivering the class and method or school she/he follows). Additionally, there are particular characteristics in each class in terms of size of members (dancers, guests), space, temperature, layout, duration, and music accompaniment which impact differently on the way dancers engage through their sensorial modalities to learn.

Each ballet class is unique and a highly social activity in which dancers learn distinctively, through a variety of sensorial stimuli, which I noted during my fieldwork whilst investigating the composition of their sensorium. The learning routine in the ballet class, consists of dancers observing or listening to the teacher's explanations of the exercises in order to execute the full version of the steps with the music. The teacher often gives feedback

in multiple ways based on their observation of the dancers' performances. For instance, feedback through voice instructions, or touch the dancer for a kinaesthetic-tactile correction, or demonstration of the correction by the teacher. Dancers also observe their peers and themselves with support from the mirror in class. This approach follows each exercise in succession, beginning with the barre and ending in virtuosic sections, such as jumps, in the centre. The class involves repetition of sequences and experiments of trial-error of movements. Most importantly, experienced ballet dancers engage with multiple senses in class to learn the norms and beliefs of the institution's culture, to improve their technique and artistry and to prevent injuries.

Dancers form their sensorium in a complex process within a cultural context. This process involves, for instance, the dancers' sensorial, cognitive and emotional engagement in class. Different London-based environments contribute to the investigation of the dancers' senses and learning in distinctive ways. The dancers may enhance their learning through a deep sensorial experience of the class and awareness of how the sensorium is culturally mediated. In the following, I introduce the core case studies in my research and discuss how I approach methodologically my research questions.

2.2 The participants and their institutional ballet settings: case studies

Different representative institutional settings in London offer professional ballet classes as a daily practice. To investigate the role that an institutional cultural context has on dancers' experience of the classes and their sensorium, this study is structured around three core case studies:

1. English National Ballet (hereafter referred to as ENB) – a professional international repertory ballet company;
2. Ballet Black (hereafter BB) – a professional national repertory ballet company touring internationally with a particular focus on Black and Asian ballet dancers; and

3. DanceWorks (hereafter DW) – an independent commercial dance studio, which offers open professional ballet classes mostly attended by professional ballet dancers (whether freelance or company members).

The ballet class venues of all three institutions are based in the urban area of Central London and exemplify the city's range of characteristics between different ballet institutional settings. In addition to the company size, further distinctions include the diversity of repertoire between ENB and BB, selection of dancers, specificity of studio layouts and sizes, the distinctive histories and lengths of existence, and particularity of value systems and mission statements. In terms of ballet pedagogy, these three institutions differ according to the number of teachers, their experiences and styles, the type of musical accompaniment, and other factors.

I am aware that the comparisons are very different between each of these institutions, especially the companies and the commercial studio. However different ENB, BB, and DW as institutions may be, there are also social links between them. One of the reasons I selected these institutions is because there are links between some of their dancers and teachers. For instance, some dancers from ENB and BB sometimes take classes at DW. In addition, some dancers from ENB (and also The Royal Ballet — hereafter RB) teach at the independent studio DW. Some teachers from ENB and BB also teach at DW, and one teacher from RB teaches at BB. Moreover, some teachers worked in all three institutions.

Dancers and teachers, therefore, may transfer some cultural values and beliefs from one institution to another. Examples of such transference of values and beliefs include the aesthetic and stylistic variations of the dancers 'movements, and a pyramidal form of social organisation, as dancers are not always seen and treated as equals. Some of these dancers who are well-known ballet stars, enjoy social privileges, and may choose which class they want to attend. For instance, female dancers may attend male classes in some institutions which offer gendered classes (ENB) and learn some gender-specific steps for female and male dancers in the class.

In light of all these socio-cultural differences and certain links between their professional ballet classes, these institutions were explored as environmental settings where professional dancers learn sensorially. Most importantly, these companies allowed me to access their ballet classes and I am grateful for their contribution to my ethnographic research. In the following subsections, I describe each institutional setting in detail.

2.2.1 English National Ballet (ENB)

I observed ballet classes at the ENB from June 2016 until April 2018. The ENB classes were held in two of their studios[28] in Central London (at Markova House, Kensington) where the company was hosted prior to the performing season 2019/2020[29]. During the performing season, some of the classes were also conducted on the stages of the Coliseum Theatre and Sadler's Wells Theatre. Founded in 1950, ENB is an international touring company and one of the several major ballet companies in the UK. It is an associate ballet company of the Sadler's Wells Theatre. The company has approximately seventy-six dancers (thirty-four men, forty-two women and one gender-fluid performer[30]). According to dancer and contributor to *Dance Magazine* Courtney Escoyne (2018), ENB also hires guest dancers for particular productions, such as the *Swan Lake* (ENB, 2017) and *Sleeping Beauty*. The dancers are classified hierarchically as lead principal dancers, principal dancers, first soloists, soloists, junior soloists, first artists, artists and guests. The number of dancers in each class usually ranges from thirty-five (ENB Class 4) to sixty (ENB Class 6). ENB's morning classes last one hour and fifteen minutes and take place in the studio from Monday to Friday (10.15-11.30am) and on-stage on performance days (11.30-12.45pm). All classes are accompanied

[28] English National Ballet studio 1 where women's daily classes took place, measured approximately 40mx20m, height 16m. ENB studio 2, where the men's daily classes took place, measured approximately 20mx 12m, height 8m (see pictures in Appendix A).
[29] From August 2019 ENB moved to a specifically designed space (see pictures of these venues in Appendix A). ENB's new home in Canning Town brings the company and school under one roof for the first time in 25 years.
[30] Chase Johnsey worked with ENB over a temporary contract in the production of *Sleeping Beauty*, as explained Escoyne (2018a).

by a professional pianist. The daily class is followed by rehearsals, specific to the forthcoming productions. The dancers have some free resting time when the performance is on the same day in the evening.

I observed seven ENB classes with teachers Loipa Araújo, Irek Mukhamedov, Dmitri Gruzdev, Hua Fang Zhang and Yohei Sasaki. Amongst these teachers, one (Gruzdev) teaches in two institutions of my research (ENB and DW). The ENB hires between four to six ballet masters/mistresses each year and invites guest teachers as well. The variety of teachers aims to refine the dancers' skills and enhance their versatility in the ever-increasing technical and choreographic demands of the company. When at home, ENB has a gender-binary[31] structure of classes and segregates men's and women's classes. For example, female dancers' classes with Loipa Araújo[32] are taught in the Cuban method and male dancers' classes with Irek Mukhamedov and Dmitri Gruzdev follow the Vaganova school. Whereas this gender specific organisation of teaching is not a standard practice in many contemporary repertory ballet companies today, it is not unusual either. For instance, this more traditional gender-separation of classes is habitual in another major ballet company in London — RB[33]. The gender-binary classes in the studio change when the classes take place on stage, the ENB (and the RB classes) united female and male dancers mostly doing the same type of movements.

ENB dancers perform the company's choreographic repertoire nationally and internationally. Over the course of this research, I attended performances of the ENB dancers created by several renowned choreographers, including William Forsythe (*In the Middle, Somewhat Elevated,* 18.04.2018 and *Playlist Track 1, 2,* 18.04.2018), Pina Bausch (*Le Sacre du Printemps,* 22.03.2017), Hans Van Manen (*Adagio Hammerklavier,* 22.03.2017), Akran

[31] In this case, the gender-fluid dancer took the women's class, and did the pointework as well.
[32] Loipa Araújo received her ballet education with Alicia and Fernando Alonso among many renowned ballet teachers in Cuba. Araújo was principal teacher with Ballet Nacional de Cuba and recognised as one of the 'Four jewels of Cuban ballet' (ENB, 2017). During my research Araújo was artistic director and teacher at ENB.
[33] In the RB, women's and men's classes usually take place from Monday to Friday in the morning; and, on days of performances also at the weekend. Each RB ballet class usually involves approximately twenty-five to sixty dancers (Marquez, interview, 22.02.2017; Chapman, interview, 30.03.2017). RB has approximately ninety-nine dancers, six ballet masters and thirteen guest teachers (ROH, 2017).

Khan (*Giselle,* 23.09.2017), Kenneth MacMillan (*Manon,* 13.04.2018), Christopher Wheeldon (*Cinderella,* 07.06.2019), Wayne Eagling (*Nutcracker,* 23.11.2016), Derek Deane (*Swan Lake-in the round*, 08.01.2019), Annabelle Lopez Ochoa (*Broken Wings, 15.04.2016*), Yabin Wang (*Medea, 15.04.2016*) and Aszure Barton (*Fantastic Beings,* 18.04.2018). Working with choreographers coming from different training systems, styles and dance genres have an impact on the ballet dancers who need to be ready to perform this great breadth of repertoire. This means that the daily ballet class, also needs to support this breadth. However, ENB offered dancers company classes solely in classical ballet, which were not aligned to each particular choreographic style of their varied repertoire[34].

During the course of the research, I observed seven company classes to understand the specific experience of the dancers. I also interviewed one lead principal dancer, Fernanda de Oliveira, a Brazilian dancer trained in the Centro de Dança Rio and The Royal Ballet Upper School. Oliveira (interview, 14.03.2017) has performed for almost twenty years with the company. Unexpected internal issues between the hierarchical levels of the company (dancers-direction)[35], however, made it difficult to interview more dancers.

2.2.2 Ballet Black (BB)

Founded in 2001, Ballet Black is a company with a mission to promote diversity in ballet, in particular 'giving Black and Asian descent dancers opportunities' to develop their professional careers (BB, 2017). Each ballet class hosts approximately twelve dancers. In addition to the seven permanent company members, each class includes several guest dancers. The guests are either independent dancers, or affiliated with other companies, such as the Scottish Ballet (Alves, interview, 12.04.2018). These guests sometimes perform with BB.

[34] The ENB dancers had particular additional coaches. For instance, after the daily class, *repetiteurs* from William Forsythe's, Pina Bausch's and Akram Khan's company rehearsed with the dancers, for their choreographic productions.

[35] Journalists Kate Buck (2018), Connor Boyd (2018), Teresa Guerreiro (2018) and Mark Brown (2018) referred to dancers' reports about the dance company's environment and highlighted social, cultural and political tensions at ENB in their news articles.

In comparison with ENB, the BB is considerably smaller in size, with seven permanent dancers — three men and four women. BB dancers are classified hierarchically as senior artists, junior, or apprentice artists (BB, 2017; 2019). BB is also significantly different from ENB in terms of the number and size of studio spaces[36] (see Appendix A). Another contrast to ENB is that BB daily ballet classes mix genders, at present, female and male dancers dance together. Also, there is no live musical accompaniment. Rather, classes are taught to recorded music (played on an electronic device, such as an iPhone). Morning classes usually take place from Monday to Thursday, Saturday and Sunday (10.00-11.30am). This pattern of working days is established to accommodate their working partnership as Associate Company of the Royal Opera House. Since 2011 the partnership between The Royal Ballet and BB allows the use of one of the studios at The Royal Opera House for classes and rehearsals on Sundays. RB studios offer more space for dancers to move in class than the BB studio. Therefore, somewhat uncharacteristically, the BB dancers rest on Fridays, instead of Sundays.

From April 2017 until April 2018, I observed classes at BB company in Central London, both in their rented studio (at 12 Lisson Grove, Marylebone) in 2017, and in their new studio (at 12 Rossmore Road, Marylebone) at the Feather's Community Centre when they moved in 2018. I observed classes with five teachers at BB. In 2017, I participated in two company classes at BB as a dancer with teacher Damien Johnson. Class is followed by rehearsals for forthcoming productions and sometimes by performances in the evening with resting times in between these work activities.

The company employs freelance part-time teachers who also teach in other ballet companies or independent commercial studios (such as DW). For instance, Denzil Bailey, as well as former ENB dancer Louise Bennett, teach at both BB and DW. Former RB first soloist,

[36] Ballet Black L-shaped studio space where mixed-gender daily classes took place until 2018, measured 6.7m x 9.14m, and an extra 3.6m x 3.6m for the L-shape. Height 2.8m. In contrast, since January 2018, BB's new studio where mixed-gender ballet classes take place measures 14m x 7.8m. Height approximately 4 m. (See pictures on Appendix A).

Deirdre Chapman teaches at the RB and BB. Sarah Daultry and Charlotte Broom both teach at BB and other independent studios. In contrast, during my research, only one teacher, former BB principal Damien Johnson, taught exclusively at BB and also danced at the company.

BB tours nationally and sometimes internationally[37]. BB dancers mostly work with choreographers who create the choreographic pieces specifically for them. From 2016 until 2019, I attended BB performances featuring choreographies by Arthur Pita (*A dream within a midsummer night's dream*, 01.03.2017), Annabelle Lopez Ochoa (*Red Riding Hood*, 15.03.2018), Cathy Marston (*The Suit*, 15.03.2018), Mthuthuzeli November (*Ingoma*, 14.06.2019), Sophie Laplane (*Click!*, 08.11.2019) and Martin Lawrence (*Pendulum*, 08.11.2019). Additionally, BB performed in 2018-2019 in collaboration with other dancers from various UK ballet companies, such as Birmingham Royal Ballet, Scottish Ballet and The Royal Ballet (BB, 2019; ROH, 2018; SB, 2019). In 2018, I also viewed the live webcast featuring dancers from BB, The Royal Ballet Company and Scottish Ballet who performed together in the same production (ROH, 2018).[38] Additionally, BB was one of the first companies to perform at the new Linbury Theatre at The Royal Opera House in June 2019 (ROH, 2019).

Given that the BB repertoire includes choreographers with different training systems, the daily ballet classes include some elements particularly aligned with their varied repertoire. For example, when dancers were preparing to perform Marston's *The Suit*, sections of the daily class included contraction of the spine, which belongs to the contemporary ballet genre. Yet, for the most part, BB daily classes follow the elements of a traditional ballet class.

I interviewed five BB dancers, whom I briefly introduce below to show their varied ballet backgrounds and working experiences. Damien Johnson is an American dancer trained at the SAB with professional experience at the Dance Theatre of Harlem, New Chamber

[37] Even though it is typically not easy for small companies without substantial funding to tour internationally, BB dancers performed in Italy during the 2019/2020 season.
[38] This particular production focused on Kenneth MacMillan's choreographies (*Steps Back in Time: House of Birds, Danses Concertantes, Laiderette*) and was restaged by Viviana Durante on 18.04.2018 at The Barbican Theatre. This production was also registered in a written article by dance writer Jann Parry (2018).

Ballet, and Los Angeles Ballet. Johnson joined BB as a senior artist and teacher (interview, 06.04.2017). Cira Robinson[39] is an American dancer with professional experience at the Dance Theatre of Harlem and as a senior artist at BB (interview, 16.04.2018). Robinson occasionally teaches in the BB and is a guest dancer with the Scottish Ballet (SB, 2019). José Alves[40], BB senior artist, is a Brazilian dancer with ballet education from Adalgisa Rolim Ballet School and the Bolshoi Theatre School in Brazil, with professional experience at *Ballet Jovem Palacio das Artes* (Belo Horizonte Palace of Arts) and *Teatr Muzyczny* (interview, 12.04.2018). Another BB senior artist, Isabela Coracy, is a Brazilian dancer trained at Centro de Dança Rio, who has performed with Deborah Colker, São Paulo Dance Company, Youth Ballet of Rio de Janeiro Municipal Theatre, Brazilian Company of Ballet (interview, 13.04.2018). An additional dancer interviewed, Light (pseudonym), is artist with the company, and requested anonymity, therefore the real name and background of this dancer are not included here (interview, 10.04.2018).

2.2.3 DanceWorks (DW)

In contrast with the two ballet companies discussed above, DW is an independent commercial studio based in Central London (in 16 Balderton St, Mayfair), founded in 1982. Given that it is not a company with a specific repertoire/performing goal, DW's classes are open to dancers from different abilities and backgrounds. The studio offers open dance classes of various genres of dance and fitness, including professional ballet classes. Of interest here, ballet classes are attended by professional dancers from dance companies (including BB, ENB) but also by London's West End performers from musicals, as well as other dance productions. Ballet classes are also open to free-lance dancers from and outside of the U.K., thus a multiverse of professional dancers attend ballet classes at DW.

[39] Robinson was nominated for Outstanding Female Performance at the Critics Circle National Dance Awards in 2013.
[40] Alves was awarded Outstanding Classical Male Dancer at the National Dance Awards in 2019.

Each class usually consists of twenty to thirty-five dancers, of mixed genders, age groups, ballet backgrounds, and professional experiences. Despite this great diversity, the majority of the dancers are female, with male dancers making up approximately a quarter of the group. The classes mainly take place in one studio[41] with live piano music or pre-recorded music (played on a digital device). DW offers ballet classes every day of the week on a drop-in basis. The classes last one hour and thirty minutes. There are several ballet teachers with a great variety of pedagogic approaches. In contrast with the other two institutions, dancers pay to take classes at DW. [42] This creates a particular aspect of the ballet class culture and follows the commercially-driven ethos of the studio, meaning that classes are sometimes crowded.

From February 2016 until December 2019, I participated in one-hundred and fifty-five professional ballet classes at DW with seventeen teachers — Roberta Marquez, Sander Blommaert, Jeena Lee, Layla Harrison, Liz Alpe, Louise Bennett, Denzil Bailey, Dmitri Gruzdev, Nina Thilas-Mohs, Kristian Ratevossian, Christina Mittelmaier, David Kierce, Darren Parish, Raymond Chai, Adam Pudney, Anna du Boisson, and Rose Alice Larkings. Some of these teachers were dancers or teachers with professional ballet companies, such as BB and ENB. For example, Chai, Bailey, Thilas-Mohs and Pudney all teach at BB and DW, Bennett danced with the RB and teaches at BB and DW, Lee danced at ENB and teaches at DW, Gruzdev danced at ENB (where he also teaches), and Marquez and Bloomaert danced with RB and teach at DW.

I interviewed four dancers about their ballet experience in DW. Their backgrounds are presented briefly below to demonstrate their different ballet backgrounds and working experiences. Roberta Marquez, a Brazilian ballerina, trained at the Maria Olenewa State Dance School, with experience at the Rio de Janeiro Municipal Theatre Ballet. For almost twenty years Marquez was a principal dancer with The Royal Ballet. Marquez was still performing with the company during this research, and she taught at DW (interview, 22.02.2017). Rose

[41] DW's studio space where mixed-gender professional ballet classes take place measures 9,50m x 12,10m. Height 4m (see picture in Appendix A).
[42] Dancers paid a fee of two pounds sterling to the reception and another eight pounds sterling fee for the class in cash directly to the teacher. These prices were correct from March 2016 until December 2019.

Alice Larkings[43] is an Australian dancer trained in *École de Danse Classique* in France and Basel Theatre Ballet School. Larkings is a ballet dancer, choreographer, and artistic director of the company International Arts Collective, which tours internationally. Larkings both attends ballet classes and teaches at DW (and also at the Pineapple Dance Studios) (interview, 20.05.2018). Clare Freeman-Sergeant[44] is a British ballet dancer and teacher who graduated with a BA (Hons) from the RAD and an MA in dance studies at University of Roehampton. Freeman-Sergeant received her ballet education in the Caribbean with ballet masters from the Paris Opera and ex-directors of La Scala de Milan. Freeman-Sergeant also has teaching qualifications from the BBO – British Ballet Organisation (BBO), and is a Fellow of ISTD (Imperial Society Teachers of Dancing) Imperial Ballet Faculty. Freeman-Sergeant participates in ballet classes at DW as a dancer, and also sometimes covering for some of their teachers (interview, 13.04.2018). Christina Rebecca Gibbs is an Australian dancer trained at the ENB school, who participates in ballet classes at DW and has professional experience on productions with the New English Ballet Theatre – NEBT, ROH, Matthew Bourne's *Red Shoes*, Broadway musicals such as *The Phantom of the Opera*, *Anastasia*, among others (interview, 30.05.2018). I chose these experienced artists because they were important interlocutors who offered a variety of insights into sensorial learning. These dancers work in different institutions in the London ballet scene and share their knowledge at the DW classes. All these experiences enabled them to engage with different ballet settings.

As institutions, thus, ENB, BB, and DW offer ballet classes which differ in many elements and impact the complex sensorial engagement of a variety of dancers. In the next section, I discuss how the ethnographic work presented above (interviews, class observations, and participation) helped in my investigation of the ballet class as a place of sensorial embodied learning. My ethnographic fieldwork, as an empirical method, will reveal further layers

[43] Larkings was a finalist at the distinguished *Prix de Lausanne*.

[44] After having taught in the Caribbean, South America and Australasia, Freeman-Sergeant now teaches RAD vocational syllabus at the Central School of Ballet, at workshops and seminars for the Imperial Ballet Faculty at ISTD, as guest lecturer at RAD (BA Hons) course, non-syllabus classes from children to adults at various private and vocational schools in London.

of the professional ballet dancer's application of senses in the ballet class, reflecting on points already theoretically defined in the introduction and Chapter 1.

2.3 Methodology — The integration of ethnographic methods

In order to understand dancer's sensorial learning in the professional ballet class in different socio-cultural settings, I integrated a variety of ethnographic approaches. I followed dance scholar Theresa Jill Buckland's (2006: viii) premise of blending methods in dance studies as an established approach because it accommodates ways in which the researcher relates 'to people and their practices' as a result of personal history and cultural perspective. As Buckland (2006:3) suggests, I did a 'systematic description of the transient actions and words of people dancing'. As a researcher, I considered it important to develop awareness of how different types of research material facilitated ways of being. For this reason, I followed Pink's (2009:131) recommendations to examine the 'non-verbal, tacit, emplaced knowledge'. For Pink (2009:131) researchers need to 'employ mixed qualitative methods, analyse different sorts of research materials' in various ways to make connections between many levels of analysis.

My multi-layered methodology was based on ethnographic methods (Geertz, 1973; Spradley, 1980) and sensuous studies (van Ede, 2009; David, 2013), which together enabled me to gather information about individual cases inside each ballet class. As a dance researcher, I created a source of primary materials to engage with the participants. I observed classes at ENB, and BB and I participated in the ballet classes at BB and DW. I was inspired by scholars who use participant experience (Hsu, 1999; Hahn, 2007; Potter, 2007; Skinner, 2018). Moreover, I interviewed dancers from ENB, BB, and DW based on qualitative interviewing techniques (Skinner, 2012; Spradley, 1979; Farnell and Varella, 2008).

Although the link between the class and performance is outside the scope of this study, I made every attempt to attend participants' (interviewees') ballet performances and rehearsals, in order to observe if the technique they practised in class related to their performances. To observe any visible links between the sensorial approach to technique and artistry, I analysed some dancers' performances, as well as films, and archival documentation about the classes they attended, adapting Pavis' (2003 [1996]) analytical questionnaire. I discuss each of these methods in detail in the upcoming subsections.

It is important to explain that references from the fieldwork data are listed after the bibliography. They detail each class observation, participation, interview and films analysed with the names of the participants, institutions to which they belong, location, and date Further information regarding the full name of the institutions mentioned in this thesis can be found in a list of abbreviations before the bibliography section.

2.3.1 Ballet class as a performance: analytical observation

Performance studies theorist and analyst Patrice Pavis (2003 [1996]) developed a useful questionnaire with respect to field observation and film analysis of performance which inspired me to analyse the ballet classes and create the questions in my interviews (see Appendix C). Although the scope of my research is different, as I was observing ballet dancers in their learning environment, rather than in performance, I understood the live daily ballet class and the recorded classes as a type of performance. In light of that, I reflectively responded to Pavis' (2003 [1996]) questionnaire as a starting point and an instrument for note-taking in fieldwork and for registering various sensorial outputs in the context of live ballet classes and film document analysis. I followed Pavis' (2003 [1996]) premise of asking questions from a broad perspective of the performative event. Pavis' questionnaire can be used for the analysis of dances, film and theatre events and considers the event in its context. Based on Pavis (2003 [1996]), my questionnaire considered the ballet classes' content, function,

structure, organisation, and social relationships, as a type of performance involving their cultural context. This questionnaire considered the space, time, the performer (physical descriptions of bodily movements, kinaesthesia, touch, taste, smell), the audience position and reception, the function of music, noise and silence, the dynamic of performance, costumes, lighting, and objects. For Pavis (2003 [1996]:38), the performance is not reducible to signs and meaning and includes the 'kinaesthesia of actors' as an element of analysis. The adaptation of such a questionnaire as a research method was already employed by Tomic-Vajagic (2012) in her analysis of individual dancer's performances of ballet roles whether captured on film recordings, or in theatre/live performances. Tomic-Vajagic's (2012) study inspired me to adopt Pavis' (2003 [1996]) questionnaire in my investigation.

Additionally, I attended rehearsals and performances of the ENB and BB companies to understand the connection between the technique the dancers learnt through their senses in the daily ballet class and that used in performances of choreographies on-stage (all events attended are detailed in Appendix J). Throughout the duration of this research, I attended seventy-eight performances in total: seventeen of English National Ballet, four of Ballet Black, thirty-three of The Royal Ballet and twenty-four from other dance companies. Other ballet companies' performances in London were used as additional sources to investigate a variety of ballet choreographic styles, the relation between the dancers' senses in ballet class and on-stage performances.

In the case of limited access to the institutions, analysis of selected films and archival documentation of ballet classes, rehearsals and performances in public domain were alternative sources to my participant observation. I selected films which captured live classes, rehearsals, and performances with the dancers and some teachers from BB and ENB. For example, a class film of an ENB male class (World Ballet Day, 2016), rehearsal film of ENB for *Manon* (World Ballet Day, 2018) and *Song of the Earth* (World Ballet Day, 2017), rehearsal film of BB at the Royal Opera House (ROH, 2019; BB, 2018) and performance film of excerpts from *House of Birds, Danses Concertantes* and *Laiderette,* uniting dancers from

the BB, Scottish Ballet, and Royal Ballet at the Barbican (ROH, 2018). Moreover, I watched recordings of public interviews with BB dancers (VOA News, 2018; African News, 2018; BB, 2017) and ENB teachers (ENB, 2017; ENB 2019; Chang, 2018). To understand which senses were at play in my analytical study of the class and its links to artistry I adapted Pavis' (2003 [1996]) questionnaire.

2.3.2 Participant Observation in Fieldwork

Although anthropologist Clifford Geertz's (1973; 1988) approach is approximately fifty years old, his studies were still valuable to my investigation because they offer multiple layers of analysis of the fieldwork. For Geertz (1988), the classical version of ethnography in social anthropology involves the researcher experience and engagement with the participants' daily practices in their environment, taking notes in a diary, thinking carefully about what is lived and talking with them to interpret their version of the world. I followed Geertz's (1973:317) notion of 'thick description', as a multi-layered analysis of the field, in which the researcher provides the cultural context and meaning that the participants place on their behaviour.

The busy schedules and touring productions outside London limited my access to dancers of ENB, BB, and DW daily classes. This meant that my research lacked the deep engagement with the participants that traditional ethnography requires. For this reason, my observations and participation occurred at intervals throughout 2016, 2017, 2018, and 2019. Despite these gaps, it was important to me as a researcher to follow Geertz's (1973:317) suggestion of creating a dialogue with the participants in the three case studies. This dialogue enabled me to write what the dancers perceived in the field through a descriptive interpretation of their experiences. To elucidate the participant's experience, in my field diary I record

detailed multi-layered information of the socio-cultural context of each ballet class. As sociologist James Spradley (1979) recommend, through observation I understood, learnt and described in-depth the cultural differences between human beings.

Altogether, I observed seven classes at ENB, seven classes at BB and participated in two classes at BB and one-hundred-fifty classes at DW. My study at ENB, BB, and DW in London involved approximately one-hundred-fifty professional ballet dancers and twenty-six teachers (as detailed in section 2.2). In these classes, I took notes during and after the field observation with the rigour suggested by Geertz (1973), Spradley (1980), and supported by Pavis' (2003 [1996]) questionnaire, I could observe and analyse the ballet class as a performative event in its cultural context. The aim of observing such a great number of teachers, dancers and ballet classes was to investigate the dancers' use of their sensorial learning in different socio-cultural circumstances. For this reason, I observed the dancers' sensorial engagement by attending classes with different teachers, on various days of the week, time of year/season, on the day, before and after performances. In order to gain an emic perspective of the participants' sensorial learning I followed the cues from observations and my participation in the ballet classes. These hints helped me form the interview questions. The use of this approach enabled me to uncover which senses were employed at the ballet classes. The limitations of observing many classes and participants were the substantial amount and complexity of data collected, and time required for analysis. In Appendices G and H, I attached extracts from my field diary, with excerpts about the ENB and BB ballet class observations.

2.3.3 Participation in ballet class

The researcher's participation in the dance event includes their perceptions of the experience in the investigation and is less common as a methodological tool than observation. According to anthropologists Hélène Neveu Kringelbach and Jonathan Skinner (2012:217), an approach which considers the participant experience 'might allow for more robust acts of

culture-making in concert with those whom we study'. Ethnomusicologist and performer Tomie Hahn (2007:59), attended dance classes in her research, and found the participant experience enabled comprehension of the 'cultural aesthetics, social structures and interactions'. The socio-cultural elements of the class were also key for my understanding of the particular qualities of the dancer's sensory experience as the Other.

Participating in the context of research with attention to deep sensing (Santos, 2018) includes a variety of perspectives one can sense and enables a different understanding of the contexts in which the senses express themselves. For instance, 'what the researcher sees in a particular group does not necessarily coincide with what that group sees in the researcher seeing them' (Santos, 2108:167). As a researcher and dancer in the field, I built 'an internal ecology of sensorial experiences' to attend to the different encounters generated by the research (Santos, 2018:183). I attended many ballet classes drawing on van Ede's (2009), Hahn's (2007), and Santos' (2018) premises of participation.

I agree with Potter's (2007) remarks that the bodily changes perceived by the researcher, who is also a dancer, have the potential to explore the internal accumulation of bodily knowledge experienced by other dancers. For this reason, scholars who have adopted the double role (insider-outsider) as a researcher and as a dancer/practitioner have inspired my investigation. For instance, research by ballet dancer Salosaari (2001) from the perspective of a teacher in ballet class, or by Potter (2007), as a student in ballet and contemporary classes were particularly useful. Whilst investigating different contexts, other studies were also helpful, such as Skinner (2018), as a student in tango classes, Hahn (2007), as a student in Japanese dance classes, and anthropologist Anne Cazemajou (2011), as a student in yoga classes.

There is a difference between the focus of attention from the position of participant and observer. For Hsu (1999:15), the researcher participating in the position of 'student engaged in the practical training may want to focus on specific technical details while the participant-observer may prefer to observe the interpersonal exchanges between teacher and stu-

dents'. The 'participant experience' approach allowed me, as Hsu (1999:231) noted, 'to explore some non-verbal aspects of learning'. My participation in class served the purpose of gaining a cognate experience with the dancers. Studying the transmission of knowledge in Chinese medicine rather than dance, Hsu's (1999:15) approach guided me to engage in the 'participant experience' and immerse myself in learning 'specific technical knowledge and practice' in the class. I attended the classes as a professional dancer and researcher who learnt and interacted with the participants in the position of 'teachers' and other dancers as my 'colleagues'.

I am aware that my experience was not the same as that of the participants, yet these opportunities brought me closer to experience the professional ballet classes in London. I experienced different ways of moving, behaving, learning, and asking questions. Yet, I acknowledge the advantages and disadvantages of being in this position. As a participant, after each ballet class, I recalled in my memory the experiences and registered them in my diary immediately. These reflections helped me to understand the socio-cultural setting and analyse the participants' perspective in their interviews compared to their actions in the field. An extract, from my field diary at a DW ballet class can be found in Appendix I. The independent studio DW and its schedule of open classes all year enabled me to engage with professional ballet dancers and teachers and participate regularly in many professional ballet classes for four years. At BB, when the teacher and the director invited me to participate in the company daily classes, I decided to only attend two classes as I knew the company toured, therefore I reserved all my attention to observe the dancers. I did not ask to attend classes at ENB company because they had an even busier touring schedule than BB, and usually did not accommodate guests in class.

2.3.4 Interviews

Skinner (2012) defines an interview as an encounter face-to-face between two participants with an exchange of verbal information through talking and listening. The word interview comes from the Latin 'i*nter*' which means view and the French word *'entre voir'*, that is to say as a glimpse into a particular world of the other (Skinner, 2012:16). According to Skinner (2012), the interviewer aims to describe and interpret a phenomenon, lived by the interviewee. Drawing on Skinner (2012:55), the interviews I conducted with the professional ballet dancers were a collaborative process, discussing specific themes that emerged from their practice. Several weeks after the interviews, I conducted conversations as part of this collaborative process with the participants in order to verify my interpretations of what they said.

Outside the dance context, in sociological research, Spradley (1979) suggests structured questions in the ethnographic interview focused on the singular experience of the participants. Based on Spradley's (1979:60) qualitative approach I divided the interview questions into 'descriptive' (to collect a sample of the participant's language), 'structural' (to explore domains of their cultural knowledge) and 'contrasting questions' (to discover the dimensions of their meaning). Using this structure in my interviews was useful to gather the participant's responses and also to create other individual questions. For example, questions I adapted from Spradley (1979) are 'Describe a daily ballet class' (descriptive), 'How do the teacher's/other dancers' stimuli affect your dance performance in a class?' (structural), and 'identify the difference between ballet class, rehearsals and performance' (contrasting).

In some exceptional cases, as stimuli for participants to encourage discussion of intimate and complex experiences during the interviews, cognitive scientist Claire Petitmengin-Peugeot's (1999) work is useful. Petitmengin-Peugeot (1999:4) recommends bringing the participants to the point of reliving a specific experience and helping them to 'think-through' from the level of action to the representation into words. Anthropologists Brenda Farnell and Charles R. Varella (2008) propose an approach to research movement especially considering the embodied perspective of the participant. For Varella and Farnell (2008:215) the dynamic

embodiment serves ‘as a theoretical means to get beyond the absent moving body in embodied social theory’. Farnell and Varella (2008:217) include the ‘agentist enactment standpoint’ in the social sciences, suggesting that the analysis of human movement should go beyond a talk about the body and talk of the body, to consider a talk from the body and from the person, thus favouring a person-centred approach. Adopting this approach, I interviewed the participants to understand their perspective about their senses, feelings and thoughts in the ballet class.

I prepared an interview guide with semi-structured questions for the dancers (see Appendix C), focused on their sensorial learning in the ballet class. The interview guide was inspired by Spradley’s (1979) structured questions from descriptive to contrasting. In the preparation and during the interviews I followed Skinner’s (2012) premise of collaborative encounter, Petitmengin-Peugeot’s (1999) intimate approach to stimulate the participant to detail a specific experience and Varella and Farnell’s (2008) recommendation of considering a ‘talk from the body’ and from the person’s perspective. Previous interviews with dancers from other studies also served as inspiration, such as Salosaari (2001), Pickard (2015), Potter, (2007; 2008), Roses-Thema (2007), Dornelles de Almeida and Flores-Pereira (2013) and Ravn and Hansen (2013). A sample of one of the interviews with one of the dancers can be found in Appendix F.

As mentioned in section 2.2, I interviewed twelve professional ballet dancers: one ENB dancer, five BB dancers (two of whom are also teachers at the company), three DW dancers, and three RB dancers (two of whom are teachers at DW and BB). Even though RB was not a focus of this research, the participants transferred values and beliefs to the other institutions they participated in. I transcribed each participant’s interview and all direct quotes from the participants in the body of this thesis are referenced with their last name and the date of the interview. The interviews gathered insights from the dancer’s perspective of their sensorial learning and this information was used to verify the connection between their reports

and the behaviour I noted from class observations and my own participant experience in the classes.

2.3.5 Towards a sensuous study: engaging with the participants

As a researcher, I sustained contact with the participants within the context of their daily classes, seeking to understand their perspectives. The dancers in this study were considered as social subjects and cultural beings, following all necessary ethical requirements[45]. To understand other people's worlds and identify how, when, and why they construct and employ their sensorial modalities in cultural-specific settings, I followed van Ede's (2009:65) perspective of 'sensuous study'. In the fieldwork, I partook, perceived, and experienced with all my 'senses'. To understand 'other sensory cultures, the investigator must him/herself experience sensory perceptions of the Other' (van Ede, 2009:61). As a researcher, I made the participant's experiences akin to mine by embodying them. I followed van Ede's (2009:6) recommendations of analysis of the sensory frameworks, whilst considering 'the huge variety in human sensibilities and the many qualities of each sense'.

I also draw on Pink's (2009:130) suggestions to be aware, as a researcher, of my own sensory modalities and values attached to these. My experiences as a researcher were shared in conversations with the dancers, offering intersubjective versions of their experiences in the context where sensorial knowledge was produced. This is of importance to this thesis because it gives depth to my methodological position as a researcher.

When analysing the data, sensorial means, such as vision, breathing, touch, hearing, kinaesthesia, amongst others, were discussed by dancers and appeared interconnected with other senses (this notion will be elucidated in Chapter 6). Following a phenomenological approach, I engaged in the classes with all my senses and aimed to describe, understand and

[45] This research followed the principles of research ethics required by the University of Roehampton. The participant consent form and Ethics application DAN 2016/028 final approval can be found in Appendices B and D.

interpret the meanings of the participants' experiences. In this respect, as a researcher, I followed dance scholar Ann R. David's (2013) recommendation to engage with my senses in the fieldwork as an emplaced body in order to achieve perspective on the space, place and time of the phenomenon. This practice involved listening to the 'voice of the body' within the cultural context (David, 2013:7).

To prepare and achieve a deep sensorial awareness of the field, I attended the ballet classes before they started and when granted permission I stayed for some time after. I tried to position myself in different places in the room during observations. I conducted the research with the intention of waking up my senses and my perception of the environment. The ethnographic methods focused on a sensuous approach, which enabled me to go beyond a cognitive, behavioural and representational apprehension of the research field, as suggested by Grau (2011). I submersed myself in the ballet class through my senses and feelings.

In addition, to these European fieldwork methods, I always returned to Santos' (2018) notion of being an insider and feeling with the participants, that is to say, sharing deep sensing. In the context of the ballet classes, to feel-with the dancers meant to share and experience seeing, touching, and other sensorial modalities. To understand how the participants 'know-with' their senses, *corazonar* must be considered. This means the dancers' experiences are strengthened with 'the sensorial communion' in dancing (Santos, 2018:182). For Santos (2018:93), dance is 'one of the most complex forms of lived, experiential, bodily knowledge' which deserves special attention concerning the senses. The epistemologies of the South focus on bodies' states of dying, suffering and rejoicing, locating dance as a manifestation of the rejoicing body (Santos, 2018:92). For Santos (2018:182), the researcher must remember that 'subaltern bodies are bodies whose sensorial experiences are heavily conditioned by factors they do not control'.

In my research, the dancers are therefore considered as bodies that embody norms and beliefs in the classes limiting their sensitivity. Santos (2018:182) explains that one of the most effective weapons of the dominant power is to limit sensorial experiences of subaltern bodies,

creating and reproducing unequal relations of power and rigid cultural differences which 'naturalises sensitivity (as well as insensitivity)'. One of the first steps to decolonise the senses in ballet class, is to imagine the sensorial potentialities of the dancers. For Santos (2018:183), this is an act of rebellion against unequally between different cultures. In order to do this, Santos (2018:183) suggests the researcher should 'defamiliarise herself with what is familiar and be willing to familiarise herself with what is strange to her' through copresence and *co-razonar*. Based on unequal social relations Santos (2018) speaks of racialised, sexualised and commodified bodies. I investigate these topics associated with the use of the dancers' sensorial in the context of the ballet classes.

The premises of this method allowed me to engage with a sensuous perspective as a researcher and to stay more attuned to the subjective experience of the dancers in class in various institutional settings. The ballet technique practised in class is to a large extent an implicit embodied knowledge and the amount of information that dancers can process is limited. This multi-layered methodology enabled me to explore multisensorial learning associated with the dancers' formation of their sensoria in different ballet classes.

2.4 Summary of Chapter 2

This chapter described the three ballet institutions ENB, BB, and DW as different socio-cultural settings where dancers learn in professional ballet classes in London. Furthermore, I discussed the multi-layered ethnographic methodology including observations, participation in classes, and interviews with dancers, supported by secondary materials from analysis of ballet manuals, films and archival documentation, and attendance of performances.

Each social context promotes distinct ways dancers learn with their senses. As a researcher, I followed van Ede's 'sensuous' engagement, as well as Santos' premise of partaking, feeling and 'knowing-with the participants' considering their various ways of knowing

(2018:181). This blended methodology was constructed to provide evidence of professional ballet dancers' sensorium, how the institutional environment forms a particular cultural setting affecting the dancer's sensorial experiences in their process of knowledge acquisition and how the dancers' senses can be democratised in class.

The sensorial modalities are intersected in the professional ballet dancers' experiences of the classes at different institutions impacting their learning. With respect to researcher's positionality as discussed by Dwyer (2009), I considered it important to participate in the position of an 'insider' as a professional dancer in ballet classes and as an 'outsider' of being new to London ballet classes. However, I was aware of the benefits and disadvantages of being in these positions.

The methodological framework of my study consists of ethnographic methods of participant observation of professional ballet classes in studios and theatres. Participation in ballet classes was useful because I learnt the specific ballet technical knowledge to have a cognate experience to the dancers in London. I applied a sensuous methodology engaging in a deep experience of the senses and other 'ways of knowing' (Santos, 2018:x). The interview guide enabled me to engage in a conversation with each participant and explore their perspectives about their sensations, feelings and thoughts. These methodologies and multi-layered analysis of the data helped me to interpret the dancers' words and actions in their socio-cultural settings.

The methodological standpoint of this research facilitates the analysis of movement drawing on Farnell and Varella's (2008:217) idea of considering a 'talk' from the body from the perspective of the dancer. Based on my ethnographic findings, ballet dancers sense, think, and feel with their bodies privileging different sensorial means depending on their engagement with the environment of the class. The dancers' social and cultural engagement is related to their organisation of the sensorium and acquisition of knowledge, which I discuss in-depth in the following chapters.

Chapter 3 – Haptic and deep sensing in ballet class

In Chapter 2, I presented the institutions of ENB, BB, and DW where dancers learn sensorially and discussed the methodological approach used to address the overarching questions of my research. Dancers acquire knowledge and embody the social and cultural aspects of the technique in their relations with the members and the environment of the professional ballet classes through their senses. In Chapter 3, I explore the professional ballet dancers' sense of touch in the classes they attended in London. As described in section 1.3.2, the dancers' haptic sense is understood here as uniting the 'cutaneous touch', 'proprioception', 'kinaesthesia', and the 'vestibular sense' to provide the range of information mediated through the skin, the organ that contains these receptors, following Paterson (2007:4) and related to Santos' (2018) idea of deep sensing. In what follows, firstly, I identify how dancers felt the touch of the teacher. Secondly, I describe the ways dancers touch their own bodies and objects. Thirdly, I explain the touch felt by the dancers in their social interactions with their peers and teachers (such as greeting or other gestures of collegiality). In the final section, I briefly situate the topic of inappropriate touch.

Touch often breaks the boundaries of the dancer's personal space. Within the framework of psychology, Eccleston (2016) explains that touch as a sense implies breaking boundaries of the body by contact, discriminating what is outside one's body. The conventions of tactile interactions in ballet class differ completely from contact improvisation[46] (Bull, 1997; Albright, 2009; 2011), social dancing (Outevsky, 2013), and contemporary technique (Potter, 2007). My findings indicate that touch can influence dancers

[46] In contact improvisation, dancers interact with multiple parts of their bodies through their skin. According to Bull (1997:276), in contact improvisation 'the point of contact' of the dancers' skin (instead of hand-touch) provides the impetus for 'movement with no preset pattern', joining 'the two dancers, attuning them to each other's weight and momentum as they move' in class. Dance scholar Ann Cooper Albright's (2009; 2011) studies of contact improvisation practices attest that dancers' physical sensation of touch involves a collaborative practice and involves trespassing their *kinesphere* boundaries. For Potter (2007), the sense of touch is highly elaborated between professional contemporary dancers in class because it allows them to perceive the contact with other dancer's skin as an objective experience and feel it as a subjective experience.

positively or negatively dancers to learn in class depending on how it is used and interpreted. This two-fold aspect can also occur with other senses (explored in Chapters 4 and 5).

Touch can impact the dancers' learning of ballet technique when it is used as an instructional touch, emotional bond, and to enhance other sensorial modalities, such as kinaesthesia and memory. With this in mind, it is important to note that I am aware of recent discussions about abusive touch in ballet companies and ballet teaching in Europe and the U.S. published in the mainstream media, journals and on social media (discussed in section 3.4). Nonetheless, I have not witnessed and have no reports from the dancers I interviewed regarding inappropriate touch in any of the ballet classes in my research.

Following this brief introduction, I turn to the findings from my study. I discuss the importance of touch as a constituent of deep sensing and as part of the dancers' multisensorial learning in the ballet class. This discussion was based on three particular aspects: how dancers feel touch, how other sensorial modalities intersect with touch and how the variants of touch/being touched influence learning (based on Santos' duality of sensorial imputes as input-output). I suggest that these elements of touch compose part of the dancers' sensoria and the epistemology of the culture of their ballet class.

3.1 Dancers being touched by their teachers: physical modelling

One of the key elements in the dancer's sensorium to learn in ballet class is the feeling of touch. In my study, touch is understood as a regulated practice, following the work of a number of scholars (Hyler,1988; Warren, 1996; Manning, 2006; Hahn, 2007; Paterson, 2009; Classen, 2012; Outevsky, 2013; Krasnow and Wilmerding, 2015; Assandri, 2019). According to my findings, few teachers from ENB, BB, and DW touched dancers in the twenty-first-century professional ballet classes as previous ballet manuals proposed.

As secondary materials, I selected some internationally recognised ballet manuals to investigate the dancers' senses and learning. Although this thesis focuses on the dancers'

learning through senses, rather than on teaching pedagogy in ballet, as historical literature these manuals prioritised some specific senses in the ballet classes. To that effect, I analysed the ballet manuals from Blasis' (1830) early teachings, through Vaganova (1969 [1946]), Cecchetti (Guest and Bennett, 2007), Karsavina (1962), Fay (1997), Alonso (Schwall, 2016), to Balanchine (Schorer, 1999; Walczak and Kai, 2008). The selection of these literature was based on the methods, schools, and styles used in the classes at ENB, BB, and DW.

The relational element of touch between dancers and teachers can happen in different ways. Some teachers, such as Denzil Bailey (DW diary, 15.05.2018) and David Kierce (DW diary, 24.11.2016) first touched and afterwards provided additional explanations. For instance, touching the feet of the dancers to show the rotation *en dehors*, the alignment of the fourth position in the preparation for the *pirouettes*, the placement of the leg on the *tendu a la second*. Other teachers first brought the dancers' awareness of a movement through verbal explanation and afterwards corrected them through touch (ENB Class 6). For example, at the end of one of the ENB classes, some dancers were performing *chaînés* on pointe at the corner of the studio. The teacher Loipa Araújo first explained and then touched (pushed lightly) the dancer's shoulder as a model to show the feeling of the impetus[47] in the turn while the other dancers observed (ENB Class 4). At BB, teacher Damien Johnson touched the dancers alternated with demonstrations on his body to reiterate the correction (BB Class 1). Moreover, Louise Bennett used one of the dancers as a model for a tactile demonstration (DW, Class, 12.04.2017). In my participation at DW classes, sometimes the hands-on feedback from different teachers was not followed by further explanations because it was implied that I understood their tactile input (DW diary, 05.10.2016; DW diary, 27.04.2017; DW diary, 17.07.2017; DW, 09.06.2016). This approach of touching dancers without further explanation from the teacher served to communicate the desired alignment.

47 According to Preston-Dunlop (1995:271) the dancers' impetus means 'the energy to achieve a movement finding a preparation, or an arm movement which gives the needed momentum'. Preston-Dunlop (1995:272) defines impetus as 'the physical power to do the next move, finding where the power comes from'.

Touch was used in many ways alternated with other sensorial means. Most of the times dancers who are also teachers considered it crucial to offer tactile-kinaesthetic support to explain the quality of a movement. For instance, Damien Johnson touched the dancers to transmit a particular (kinaesthetic) feeling' of the placement of the foot *en dehors* in *arabesque* (interview, 06.04.2017). Similarly, a ballet teacher at DW Rose Alice Larkings explained how she used touch as a resource to 'help' dancers 'understand' the 'supposed' feeling of the movement (interview, 20.05.2018).

It is a rare exception for ballet manuals to detail how dancers learn from the touch of the teacher in class. For ballet teacher Marika Besobrasova (1996, cited in Warren, 1996:27), teachers must be patient to 'know the body has registered the correction'. This means feeling 'the muscles' of the dancers moving underneath the teacher's hands in the correction, as a physical response from them. Additionally, teachers 'must have the sensibility to feel not only when the [dancer's] muscle responds but also how much it has responded' (Besobrasova, 1996, cited in Warren, 1996:27). Touch becomes an instrument of the teacher's analysis of how the dancer's muscles work. For instance, if muscles stretch and relax right away or respond with vitality, they are a manifestation of the dancer's focus on the correction.

In my study, the ballet dancers reported the need to respond with their senses to the teacher's stimuli to guide their alignment, movement shape, posture, and dynamic quality (Alves, interview, 12.04.2018; Light, interview, 10.04.2018; Gibbs, interview, 30.05.2018). This aligns with Besobrasova's (1996, cited in Warren, 1996), Outevsky (2013) and Robinson's (2017) premises that the sense of touch requires the dancer's active engagement with their teacher's touch for it to work as an effective learning tool.

Touch was illustrated in the dancer's interviews as a relational element which increased awareness of their kinaesthetic feeling of placement, alignment, and a way to think about the information gathered in class (Gibbs, interview, 30.05.2018; Alves, interview, 12.04.2018; Light, interview, 10.04.2018; Larkings, interview, 20.05.2018). These dancers retained awareness of tactile-kinaesthetic sensations. For dancer Gibbs, the touch of the

teacher helped her to 'feel the movement' of rotation/turnout of the leg in *passé* and *arabesque* (interview, 30.05.2018). Such sensation constituted a type of memory or a mnemotechnic transfer, which often was recalled later. Regarding the mnemotechnic aspect, Alves reported selecting the tactile sensations he considered 'valuable' from the corrections issued by the teacher, which were retained and recalled later to help him kinaesthetically feel the movements (interview, 12.04.2018). These examples remind me of Bourdieu's (1988 [1979]: 170) concept of *habitus*, in which individual practices are converted into motor schemes retained in the body, while the subject retains awareness as a memory of their social surroundings. In the ballet class, the social relationship of dancers occurred through their senses forming an individual *habitus*. In Bourdieu's (1988 [1979]) theory and my study, the *habitus* is acquired by the person in passive and active relations within their cultural codes of practices.

It is important to note that the dancers' response to touch also involved an emotional state of receptiveness to guidance as a means of communication, for instance with the teacher. Although not researching ballet, Hyler (1988) discusses the touch of the teacher on modern dancers as physical modelling associated with kinaesthetic awareness. My findings align with Hyler's (1988:42) premise that 'the skin and perhaps deeper tissues of the body sense the touch which then becomes a cue to trigger muscular contraction in the specific area being touched', as a type of bodily memory. The skin senses the touch, for instance of the hands, the feet, elbow and legs. However, Hyler (1988) does not specify how the memory of the touch stays ingrained in the dancer's body.

According to Assandri's (2019:203) study, most ballet students in class appreciated the hands-on approach of the teacher associated with verbal and visual approaches to 'develop sensory skills'. Assandri (2019:199-200) classifies the ballet teacher's touch in three categories. Firstly, a 'light/short touch' related to a brief contact, for dancers to straighten their knee, point their foot, lengthen their back, lower their shoulder. Secondly, a 'sensitive/occasional touch' on intimate parts of the body which can be subject to misinterpretation by dancers. For

example, touch the inner thighs to improve the dancer's turn-out, touch the back of the legs or gluteus promoting 'stability', touch the upper chest/breast to 'release the tension' and avoid pushing their rib cage out. Thirdly, a 'longer touch' sustaining contact to hold and manipulate a part of the body. For instance, touch the foot or leg to find the rotation of the turn-out, and pressure on the foot to promote the utilisation of the metatarsals. For Assandri (2019:204), the teacher's touch help dancers to feel proprioceptively the position of their muscles enhancing their 'cognitive, affective and motor skills'. Assandri's (2019) contribution to ballet pedagogy through his classification of the qualities of the teacher's touch in class was useful to my study as my ethnographic findings indicated that all these types of touch were used by teachers in some of the investigated ballet classes.

To enrich my argument on how dancers of diverse ballet cultures felt the sense of touch I included examples from my experiences of the ballet classes (as explained in Chapter 2). My study is not a comparative one between ballet cultures from England and Brazil. However, as a native Brazilian, ballet dancer, and teacher, in my participation in the ballet classes in London, the teacher's touch was rarely used compared to classes in Brazil. One possible explanation is that people in Brazilian culture consider tactile interactions common and the use of touch is widely accepted in ballet class by dancers and teachers. As the Royal Academy of Dance ballet teacher, Bartira Barreto noted, 'in Brazil, you actually would choose to be taught by those teachers who made the effort to stand up and walk by to touch the dancers' and help them understand what a specific correction means kinaesthetically (RAD, 2017a:1). According to Barreto, a 'kinetic connection with hands leading the muscle, limb, joint and head' suffices (RAD, 2017a:1). In Brazil, the teachers who instruct through touch are often considered more dedicated to their pedagogic practise in ballet. Yet, in both England and Brazil the dancers bring into the daily class their own experience conditioned by their *habitus*, supported by the knowledge of global ballet culture and a ballet institutional culture.

In the ballet institutions researched in London, dancers experience touch in their social interactions in class, as part of an English cultural context. However, the use of touch in the

ballet class in the context of London ballet culture differed and was less prominent when compared, for instance, to the use of touch in ballet classes in the Brazilian culture. Possibly this cultural difference associated with touch relates to the social anthropologist Kate Fox's (2004:33) description of English people being 'not particularly tactile or physically expressive, not given to much touching or gesticulating'. Even though, the participants in the classes I investigated are diverse and represent various international cultural groups, including British people, they did not commonly use touch as a means of communication. This was similar to the culture of touch outlined by Fox (2004) and representative of the people in Britain. My findings indicate that the dancers' sense of touch, are culturally-specific and involve reasoning and affective sensations.

In my study, the ballet classes, as cultures, differ when considering the frequency and type of touch dancers use and feel at the three ballet institutions. At DW classes, only a few teachers often used 'longer touch' on dancers. At BB classes, dancers frequently used 'light touch' with their peers, but the teachers rarely touched dancers. The class observations indicated that at BB only two out of seven teachers touched dancers as a way of providing feedback (BB Class 4; BB Class 5). Conversely in the culture of ENB classes, teachers and dancers often used 'light/soft touch' and 'longer touch' to transmit knowledge (Assandri, 2009:199/200). Following Assandri's (2019) classification, the teacher's use of 'soft' and 'longer touch' at ENB and DW classes promoted cultural differences and multisensorial environments for the dancers to learn. Through this perspective, dancers in class have the teacher's touch imprinted in their bodies as a tactile knowledge enabling them to identify with the essential aspects of movement intention.

As previously mentioned, touch functions as a social aspect of the class and as a means to communicate affect (Potter, 2007). Yet, there is a power-play concerning touch between the hierarchical positions of the teachers, who chose which dancers they touch. For Hahn (2007:102) and Manning (2006:9), this type of touch is 'political' because it involves a power play and the control of information from the encounter of the person who decides to

touch, and the other who receives the touch. Following Manning (2006:9), I consider touch as 'political gesture' and an 'ethical discourse' because a person cannot touch 'without being responsible for doing the touching', and without the other person 'being responsive'. Manning (2006:57) argues that 'touch is first and foremost a sensation, a manner of incorporating the world, of embodying the actuality (and virtuality) of an other'. Yet, Manning (2006) notes that whilst bodies are always relational, the reaction to touching is unpredictable. Hahn's (2007) and Manning's (2006) ideas of touch as a political gesture support my analysis of the power relationship of the touch of the teachers on dancers and the touch between dancers in the class.

In my study, dancers received more tactile input from teachers at DW and ENB classes, than from teachers at the BB classes. Touch as a feedback tool is often accompanied by the teacher's instructions and demonstrations, and the dancers practice afterwards. There is a greater complexity when it comes to dancers feeling the touch as a learning tool. Firstly, because touch immediately involves the kinaesthetic sense from the teacher's pressure on the dancer's skin. Secondly, teachers usually do not use touch alone but in relation to other senses, for instance, a visual image in the mirror and verbal instructions. This was seen in DW when the teacher turned the dancer's foot to expose the brand of the shoemaker with additional explanations (DW, Class, 12.04.2017), and in ENB when the teacher softly touched the dancer's shoulder, explained verbally, and demonstrated the force needed to do the turn (ENB Class 4).

The dancers who were not touched by the teacher also profited from the correction by hearing the instructions and watching their demonstrations. These dancers, acting as observers focused their attention on the teacher's guidance through an empathetic kinaesthetic-visual-aural feeling. In this case, the observers watched the correction on the dancer, who was used as a model and felt the teacher's haptic guidance as an empathetic sensation. These teachers used a tactile-kinaesthetic-visual-aural tool to help the dancers retain a memory of the touch and the sensation of the rotation in their bodies, a visual image of the aesthetics of the turn-

out, and aural explanations, as an example for them to save and trigger in future executions of these movements. These examples of touch being related to the dancers' visual sense in the ballet class, are similar to Bull's (1997) argument of the interconnection of the dancers' senses of touch and vision. Yet, in my study the teacher's haptic guidance often interconnected the dancers' feeling of touch with kinaesthetic, visual and aural sensations, which I discuss in Chapter 6.

3.2 Dancers touch their own bodies and objects

Dancers from all the three venues touched their own bodies to bring awareness and gain sensorial interpretation of a proprioceptive state, release tension, alleviate fatigue and pain through self-massage, and stretch. Many dancers have the habit of touching different body parts[48] during the exercises but avoid touching parts considered intimate, such as their breasts and reproductive area (ENB Class 1, 4, 6; BB Class 1, 4, 5, 6, 7; DW diary, 18.05.2016). Furthermore, I observed that the BB dancers pedagogically were allowed to self-touch, but the teacher's touch was less used, and this was a cultural trait of their classes (BB Class 1; BB Class 4; BB Class 5; BB Class 7). For BB dancer Light the teachers did not touch to avoid parts of the body considered intimate, such as the hamstrings (interview, 10.04.2018).

When dancers concomitantly touched parts of their own bodies for proprioceptive awareness and checked their movement aesthetics in the mirror (ENB Class 4), they created a blended sensorial experience of visual and haptic. In the dancers' search for alignment, they learnt multisensorially when touch, vision, and proprioception were activated at the same

[48] From my observations of the classes at the three venues, I listed the areas dancers most touched. The dancer's hip was the most common among all of them (ENB Class 1, 6, 7; BB Class 1, 4,5; DW 18.05.2016), followed by dancers touching their abductors, and the abdominal region at ENB (ENB Class 1, 4, 5, 6, 7). BB dancers touched their abdominal region and femur muscles (BB Class 1, 5). DW dancers touched most their back, shoulder blade, and lumbar region (DW 09.06.2016; DW 02.04.2018).

time. Dancers may retain this multisensorial experience of alignment and recall it as a stimulus for the execution of similar movements. In this case, touch functions as a proprioceptive mnemonic tool and helps the dancers not to rely solely on their visual image in the mirror.

The interconnected relationship between touch and other senses is complex; they may promote one another, or they may substitute one sense for another. Touch stimulated proprioceptive awareness, which then made the ocular-centric culture of a ballet class less evident. For Bull (1997), ballet is organised by the visual sense through observation of symmetrical patterns and attainment of clear body lines. Yet, the sense of vision can also be tied to the sense of touch. For instance, the sense of touch plays a significant role in *pas de deux* – ballet choreography (Bull, 1997:274). Dancers in my study self-touched in ballet classes alongside other sensorial modalities, such as proprioception, as noted by Hyler (1988), Montero (2006), Outevsky (2013) and Assandri (2019). In my study, both touch and vision interconnected when dancers felt the sense of touch from their teachers or their own touch in ballet class and looked at themselves in the mirror or at the teacher's demonstrations (ENB Class 7).

In relation to this, Noë explains that perceptual experiences, such as 'visual experience' and 'tactual awareness are activities of exploration' which can be 'mediated by the characteristic sensorimotor contingencies of vision' (2001:51). My study shows that the dancers' perceptual awareness was an active state of interactive engagement with the environment of the class endorsed by the reflection of the perceptual experience, similar to studies by Nöe (2001, 2004) and O'Regan and Noë (2001). Most dancers at ENB, BB, and DW were constantly finessing and updating this memory in their bodies in class, with multiple senses at play constituting multisensorial learning. This type of touch was similar to the 'tactile-kinaesthetic' sensation proposed by Sheets-Johnstone and associated with the dancer's 'habit memory' of movements (2000:345). This discussion about the dancers' ways of sensing touch is useful because it relates to their memory, emotions, kinaesthetic and visual awareness.

Self-massage was another type of touch, which helped dancers to prepare for class. The dancers manifested changes in their physical and emotional states every day. From one

day to the next dancers experienced their bodies differently, through fatigue, pain, injury, well-being and happiness. For this reason, they never executed a movement in the same way and needed to be attuned with their bodies in class. There were days, when dancers found it difficult to do a class when their muscles felt tight and tired, making their movement uncomfortable.

Most dancers arrived before the class to warm up individually — usually sitting or lying on the floor, stretching, and sensing the level of tension in their muscles by self- massaging their calves, feet, and other limbs (ENB Class 1, 2, 4, 5, 6, 7; BB Class 1, 2, 4, 5, 7; DW 09.06.2016; DW 05.04.2018; DW 23.12.2017; DW diary, 27.05.2016). In the interviews, some dancers explained that touching their bodies helped to ease the feeling of tightness and soreness from cramps and pain. For instance, as a common resource, dancers squeezed a pressure point, to help release tension and prevent and/or cope with injuries (Johnson, interview, 06.04.2017; Morris, interview, 21.02,2017; Chapman, interview, 30.03.2017; Oliveira, interview, 14.03.2017; Gibbs, interview, 30.05.2018). During my class participation, I also touched my body before or after class (DW diary, 27.04.2016). The dancers self-touched foremostly for therapeutic effect, for comfort or to relieve pain, or to check how parts of their bodies may feel, and to bring a remedial sensation through massage.

Some dancers described as ‘easy days’ when they entered the class relaxed and did not touch their own bodies as much because they sensed that their spine lengthened, their muscles felt flexible and they felt the tips of their toes and fingers (Alves, interview, 12.04.2018; Johnson, interview, 06.04.2017; Robinson, interview, 16.04.2018). The perception of how the body was feeling in class showed the temporary relationship of dancers had with their bodies and the impact it had on the quality of their movements. In this context, dancers touch their bodies impacting physically and emotionally their learning. This type of dancers’ touch in class functioned as means to scan parts of their bodies through hand pressure offering detailed sensorial information of the proprioceptive state of each area. These findings align with studies by Montero (2006) and Devos (2018), which considered touch as a modality

of proprioceptive interpretation. Montero (2013) found that dancers shift between states of monitoring attentively their movements (in case something goes wrong they do something to modify them), and states of unreflective and unconscious decisions of movement execution. I agree with Montero's (2013:304) suggestion that ballet dancers execute highly skilled movements which are not completely automatic and effortless. In Montero's (2013:304) words, 'what might be thought of as automatic actions, are stagnant, yet expert performers are always trying out new approaches' of the movement. This was described in these examples of fieldwork in which dancers interconnected touch with proprioception.

Most dancers used self-touch in class, often when the teacher allowed them. For instance, dancers touched their own bodies in a freestyle stretch at the end of the *Ronds de Jambe* combination when there was 'free time' (four musical phrases) to choose movements they wanted to focus on (ENB Class 6; BB Class 3; BB Class 5; BB Class 7; DW diary, 27.04.2016). These teachers afforded time and significant opportunities for dancers in class to use self-touch allowing them to be active contributors in their sensorial learning process.

To lesser extent, I acknowledged another type of touch, that of the dancers' limbs which serves a cognitive function and is an important element to multisensory learning. For instance, the ballet dancers' limbs pass, press, and slide against each other in particular actions and steps, such as *coupé* or fifth position (ENB Class 4; DW, 27.04.2016). The dancers needed to feel the pressure of their limbs touching to add a specific tension and dynamics to particular positions or movements. For example, one foot of the dancer touched with a light pressure at knee height on the other leg to do a *pirouette* (ENB Class 1). This was significant because dancers learnt in class that when their limbs touch, the amount of pressure was associated with quality and impetus for a new movement. This type of assertive touch was also acknowledged when the dancers pressed into the floor and *plié*, for instance in a *pirouette* to go up and turn on *demi-pointe*. Learning ballet involved applying the appropriate energy to each movement and the touch of the dancers' limbs was one of the means which enabled them to embody the technique.

Another type of touch occurred when dancers had contact with different objects before or during class. For instance, dancers had a special care for their ballet shoes (flats and pointe) because it was their main contact with the floor (ENB Class 4; BB Class 7). The feeling of the dancers' feet in the shoe and its pressure against the floor were crucial and impacted their movement quality and expression (ENB Class 4; DW diary 02.04.2018). In my study, most female dancers and exceptionally male dancers, prepared[49] and wore pointe shoes in the class[50] (ENB Class 4, ENB Class 6, ENB Class 7; BB Class 1, BB Class 3, BB Class 6, BB Class 7; DW diary 07.11.2016; DW diary 08.03.2017; DW diary 02.04.2018). Before the class started some of these dancers tried on their pointe shoes to feel their flexibility, tested their balance and alignment, did small movements on half pointe/pointe, and checked the visual aesthetics of the arch of their feet *en dehors* (DW diary 27.04.2016).

To increase friction on with a slippery floor, sometimes dancers needed to sprinkle water (BB Class 7; DW 25.05.2016) or rub rosin (ENB Class 1) under their ballet shoes. In case the dancers felt the floor was too slippery, or to jump, they changed from pointe to flat ballet shoes (ENB Class 4, 6, 7; BB Class 1, 3, 6, 7; DW 01.06.2016; DW 07.11.2016; DW 13.10.2017). For the dancers in my study, the pointe shoes became an extension of the dancers' feet, felt through the pressure of their weight on their skin supporting them in contact with the floor. Teachers Janice Barringer and Sarah Schlesinger (2004 [1988]) and Schorer (1995) also discussed how the pointe work is understood as an extension of the dance training. Therefore, pointe work requires specific preparation because it uses smaller support for the feet, changing the distribution of the dancer's body weight and the sensation of the dancer's axis. Pointe work requires strength on the pointe of the dancer's feet and a new point of

[49] Dancers prepared their pointe shoes, by rubbing them in rosin, sewing elastics and ribbons, and sometimes moulding them by shaving the block/hitting the floor to loosen their firmness.

[50] Traditionally pointe work was taught only to female dancers. It was not common for male dancers to do pointe work in ballet class unless dancers worked in male dance companies, such as Les Ballets Trockadero de Monte Carlo where they can play the role of female dancers on pointe. In my study, one BB male dancer was preparing for a role in the *Red Riding Hood*, which required pointe work (BB Class 1). The other male dancer did pointe work at DW with the purpose of enhancing the articulation of his feet (making his arch more flexible), ankle, and balance, since it brought him a different awareness about his body (DW diary 08.03.2017; DW diary 02.04.2018).

balance to execute movements. These examples showed how the touch of the dancer's feet on the floor was interconnected with their balance, weight, and a visual aesthetic image in multisensorial learning.

Additionally, during the first part of the class exercises, dancers touched the barre lightly. Dancers learnt to measure the amount of pressure needed to help them balance their body weight. They were instructed to touch the barre softly (rather than to grip firmly) to test their stability preparing for the centre exercises where there was no support of the barre (ENB Class 1). Speaking as a teacher, Marquez explained to dancers in class that at the *promenade attitude derriére au demi-pointe* they should 'never put the two hands on the barre' but first touch with one hand and then change hands, as when they were partnering (DW diary, 27.04.2016). In my study, the dancers learnt to touch and use the barre dynamically as a support to practice the sensation of balance in the daily ballet class, partly also preparing them for partnering in performances. However, the teachers' instructions rarely included dancers' tactile interactions with other dancers, unless it is a *pas de deux*[51] class, rehearsal or performance. Whilst the focus of my research is not on those specialist *pas de deux* classes or rehearsals, it was important to explain that the dancers' use of touch at the barre was similar to the use of a partner's hand in a *pas de deux*.

Both examples of the dancers' feet pressing the floor and the light touch of their hands at the barre provided different qualities of intensity of touch through their skin which helped them balance or gave impetus for movements, impacting their learning. The sensation of touch from the ballet dancer's feet on the floor's surface in class was similar to the sensation described by Potter (2007:225) as 'elaborated touch' in her study with contemporary dancers. 'Elaborated touch' means the dancers' ability to develop 'heightened awareness of connection to the ground through the feet' by 'feeling the floor' (Potter, 2007:225). This haptic sensation is also aligned to Krasnow and Wilmerding's (2015:216) concept of 'discriminative touch',

[51] As Foster (1996:2) explains, in a *pas de deux,* the ballerina often touches the male dancer's 'arms, hands and shoulders', whereas the male dancer touches the ballerina's 'arms, hands and also her waist, thighs, buttocks, and armpits'.

where ‘dancers are dependent on the tactile sensations of the floor to determine the use of the footwork in training and a tactile sensation of a partner’s hands connecting to the body before a lift’. According to these studies, dancers perceive touch, pressure and vibration through their skin receptors. The notion of ‘elaborated touch’ and ‘discriminative touch’, introduced by Potter (2007) and Krasnow and Wilmerding (2015), means the dancer is capable of making fine distinctions and judgment through the feeling of the skin. In my study, the ballet dancers made fine distinctions through the touch of their feet on the floor or hand at the barre, influencing their balance and the intensity of impetus required to execute a movement. The dancers’ capability of feeling the floor or the barre in class can be extended to their haptic sensation because it includes their ‘cutaneous touch’, ‘proprioception’, ‘kinaesthesia’ and the ‘vestibular sense’, as proposed by Paterson (2009). All these complex notions constitute types of haptic sensations and occur interconnected to other senses.

A person’s touch apparatus is mainly digital, responsive through their fingers and hands, extending their personal space through physical reach. Although studying musicians and not dancers, sociologist Richard Sennett (2008:2) considers that the ‘hand’s different ways of gripping the instrument and the sense of touch’, affect the way musicians ‘think’ when improving their skills. Similarly, in my study, the dancers touched with their feet and scanned information about the qualities of the floor which helped them elicit a bodily response in relation to the amount of force required to execute a movement dynamically. Ballet dancers learnt and practised these types of touch in class as part of their bodily skills.

Professional ballet dancers felt clothing on their skin as another type of touch which influenced their movement execution, body image, and learning. Most dancers used tight clothing (leg tights, leotards, and unitards) under layers of extra clothes (jumpers, baggy trousers, skirts) to keep them warm, which they often took off during class. The tight clothing touched the dancers’ skin and showed the shape of their bodies, becoming an extension of them (DW, 27.04.2016).

Additionally, although uncommon, dancers touched some props[52] to enhance their proprioceptive feeling of the movement (ENB Class 4; BB Class 7). At DW and ENB classes[53], some ENB dancers held a small plastic ball in their hands during the barre exercises (ENB Class 6; DW diary, 02.04.2018). At BB one of the dancers used resistance band at knee height, increasing the pressure between her legs, on the *tendus* and *jetés* exercises (BB Class 7). The dancers' tactile, skin and haptic relationships with objects, clothes and shoes are similar to Assandri's (2019) notion of light touch, as a touch which promotes brief contact to help them with a proprioceptive feeling. Nevertheless, this type of touch influenced their quality of movement, either helping its execution or making it difficult.

In my research, it was considered polite behaviour for dancers to work out the movements in their own space/*kinesphere* and apologise to each other when they unintentionally touched in class. However, DW dancers disregarded the etiquette many times and omitted to apologise for trespassing the space of the other disrupting their learning in class (Freeman-Sergeant, interview, 13.04.2018). This type of accidental touch did not only happen in small spaces, but it was more frequent in a smaller studio with a crowded class, for instance at DW. As I noticed in my observations, touching unintentionally was also common at the ENB and BB classes, the difference was that these dancers apologised to their peers when this happened.

On rare occasions, dancers touched to exchange kinaesthetic knowledge with other dancers and share individual experiences about movements. For instance, in a centre exercise at ENB a senior dancer touched a younger dancer's foot and knee (*corps de ballet* dancer) in the corner of the studio to help her understand the sensation of the rotation and the pressure needed to perform the *passé* (ENB Class 4). The kinaesthetic embodied knowledge, the know-

[52] Some dancers had contact with objects before or during class, for instance, elastics for the feet, cylinder foam for muscular distress/relief through self-massage, or elastics between their tights enhancing their abductors' proprioception in the first exercises of the barre (ENB Class 4; BB Class 7).

[53] Apart from doing ballet classes at their own companies, some ENB and BB dancers keep up with their training by occasionally doing ballet classes at other independent studios such as DW (e.g. Easter holiday or on a free day from work). At some of these occasions, I was participating in these classes at DW with them (DW diary, 02.04.2018; DW diary, 24.03.2018).

how of how to do the movement was transmitted from one dancer to another through touch, providing information about the pressure of the stretched toes above knee height and the force of rotation outwards from the inside muscles of the leg (adductors). When analysed, this peer-to-peer instructional touch could also introduce some problematic connotations, as it was only used according to the perceived and real power position of a dancer high in the hierarchy in the company (ENB Class 4). However, this type of tactile interaction did not occur at BB and DW classes. There is a possible culture at the ENB class where dancers felt free to share their individual experiences with younger colleagues through touch. Whether potentially problematic or not, this example indicated a tactile-kinaesthetic dialogue between ENB dancers in class in the transmission of embodied knowledge.

Apart from practical reasons, on some occasions, many dancers connected with their peers and teachers through social a gesture of a 'light touch' (Assandri, 2019:199-200) and hugs (ENB Class 2; BB Class 1; DW diary 12.04.2019). On these occasions, dancers exchanged a range of emotions, for instance, happiness, sadness, or empathy because of an injury (DW diary, 24.11.2018; BB Class 1; ENB Class 2, ENB Class 6). A casual hug or light touch between dancers involves proximity and partial body contact. It is a non-verbal bond commonly used in the cultural setting of the class as an exchange of communicative energy.

Some ENB teachers lightly touched dancers before class as a means of bonding through a greeting followed by an embrace, and through other forms of light touch, such as a brief rubbing on the shoulders to relax the dancer while they had a private conversation (ENB Class 2; ENB Class 4; ENB Class 6). The energy transmitted by the tactile interaction, through pressure on the dancers' skin, created an emotional bond. In this context, touch participated in the construction of power relations in the ballet class as teachers chose which dancers they touched, whilst dancers rarely touched the teachers. This power-relationship was established because the person who was giving the hug or light touch was entering the dancer's personal space. Potter (2007:228) offers a different perspective, arguing that the hug in a dance class can be 'indicative of social solidarity'. In my study, the embrace dancers felt were moments

of shared physicality which may have various interpretations. In the ENB classes and in my participation at BB and DW classes, casual hugs or light touch between dancers and from some teachers formed a stronger connection/bonding (BB Class 1; DW diary, 01.06.2016; DW diary, 13.1.0.2016; DW diary, 24.11.2016; DW diary, 12.04.2019). In my experience, on some occasions, this type of touch indicated an emotional connection, care, cordiality and attention (BB Class 1; DW diary, 24.11.2017; DW diary, 08.03.2017).

The dancers in class can be considered a body-object and a body-subject through the sense of touch. Yet, regardless of the perspective, the body can be understood as an affective realm. In my research, touch is a means of communication between dancers and teachers, and their peers, involving emotions and feelings. This finding aligns with Potter's (2007) and Blackman and Venn's (2010) premises that affect is interwoven in other bodily processes, such as touch. There is a trait of affect when the touch is registered in the dancers' bodily memory. For instance, when the dancer chose a tactile correction from the teacher based on an emotional memory from a successful execution (Alves, interview, 12.04.2018). This example is in line with the theory of affect of Freud (1894) and Papoulias and Callard (2010) relating touch to memory. The casual hug or light touch some dancers felt in class functioned as an affective bond, memory and as a means of communication.

Based on Assandri's (2019:199-200) classification of the types of the teacher's touch, I observed in my study the use of 'light/short touch' as a brief contact by the teachers on dancers to straighten their knee, point their foot, lengthen their back, and lower their shoulder. A 'longer touch' was used when teachers hold and manipulate the dancer's leg to find the rotation of the turn-out. Assandri notes that the teacher's touch helps dancers to proprioceptively feel the position of their 'muscles' enhancing their 'cognitive, affective and motor skills' (2019:204). Yet, Assandri does not consider what I discuss as the type of touch as a social and emotional bond between dancers and other people in the class.

With this in mind, Hahn (2007) contextualised touch as a means of transmission of the technique. For Hahn 'touch is polysemous' because it depends on 'a range of intention,

the quality of touch, and the emotional content', produced by 'where on the body one is touched and by whom or what' (2007:102). Hahn (2007) and Assandri (2019) associated touch with emotional content. In contrast to Besobrasova's (1996) and Assandri's (2019) assumption, Hahn (2007) add a different perspective on touch by including the quality of a power relationship as a result of the teacher's touch. According to Hahn, the 'tactile encounters signal actions of information flow and control' qualifying touch as 'political' (2007:102). A casual hug or light touch can mean support or sympathy between dancers, but it can be understood as a space of political engagement, or abuse. The findings in this chapter indicate that dancers relate to their teacher or peers through an affective touch.

Most BB and DW dancers often experienced an accidental touch during exercises as possibly an intrusive sensation impacting their *kinesphere*. However, ENB was the only institution where I observed dancers learning through the exchange of individual bodily experiences through a tactile-kinaesthetic dialogue, which included states of affect and memory. Although not discussed in detail in ballet studies, these various types of touch that dancers encountered in class, including 'elaborated touch' (Potter, 2007), 'discriminative touch' (Krasnow and Wilmerding, 2015), and 'light' and 'longer' touch (Assandri, 2019) involved a sense of agency that demonstrated caring, preparing, interpreting the feelings in their bodies, both physically and emotionally in class. The variations of the dancers' haptic interactions, which were learnt and practised differently in ballet cultures, impacted the dancers' multisensorial learning.

In my study, the dancer's haptic sensation which occurs through their relations in class, carries emotional traits which orient their movements as a body-subject who feels and imparts the touch. Dancers reinforce their sense of self, when they touch their own body, feel their bodies' boundaries, and gather knowledge about their state. This aligns with Merleau-Ponty's (2002 [1942]:109) theory of perception in which he describes the 'affective qualities' people feel in their engagement with the world when they experience touch. In my study, the dancers' haptic experiences in ballet class, is a mode of perception and part of their learning.

In their study of peoples' biographies related to the sense of touch, anthropologist Taina Kinnunen and sociologist Marjo Kolehmainen (2019:30) suggest that 'people have different affective repertoires concerning touch but the ways they register touch may also differ because of their personal histories'. With this in mind, I consider that the dancers in my study perceived the world around them through an affective sensorial background.

3.3 Inappropriate touch

According to the various ballet cultures at ENB, BB, and DW, touch functions as physical modelling and influences dancers emotionally, yet it can also provoke problematic facet and connotations. There is a two-sided nature of touch in dance. In addition to a helpful, mentoring touch, dancers can also perceive a negative touch from the teacher or other dancers in the class as abusive, and even having sexual connotations. As mentioned in the Introduction of this thesis, sexual connotations of the use of touch in ballet class have already been reported by dancers through the #Me Too social movement. Moreover, some dancers[54] may not be comfortable with any type of touch.

Tactile rules in ballet classes differ between cultures. Teacher and dancer Clare Freeman-Sergeant explained that in many ballet institutions in London, ballet teachers were recently pushed to 'adopt a non-touch approach' (interview, 13.04.2018). At some ballet institutions, the rules about the use of touch were clear and registered as a policy to be followed against sexual abuse[55]. For example, the Royal Academy of Dance policy guidelines state that in ballet class physical contact between teacher and dancer 'may be misinterpreted and should be avoided', therefore where any physical touching is required, it should be provided openly in front of other students (RAD, 2013:8). Whilst not investigating ballet, social anthropologist Ruth Finnegan (2005:18) defines the teacher's touch in students as the

[54] Ballerina Gelsey Kirkland's (1987:210) book *Dancing on my grave* pointed out that an abusive touch triggered a negative emotional response from her, as a dancer, and was related to power control.
[55] There are culture-specific conventions in ballet class concerning not touching intimate parts for corrections, such breasts/chest (RAD, 2017b).

most direct invasion to one's body and regulated by culturally-specific tactile conventions. This is similar to the policies being disseminated by some London ballet associations, such as RAD and applied in a class by some teachers at DW and BB.

Inappropriate touching of ballet is a sensitive topic. Many allegations of abusive touching of professional dancers from ballet companies worldwide have been published in the media, particularly since 2018. Dancers have accused their teachers, other dancers, directors, and ballet photographers from renowned ballet institutions of inappropriate touch, physical and emotional abuse through name-calling, shoving, humiliation, threats, casting punishment and sexual harassment[56]. For instance, journalist Lilly Brooks (2020) reported that, Scottish Ballet School closed after allegations of sexual misconduct from sixty former students, staff, and parents against its teacher and former vice-principal Jonathan Barton. Similarly, the former ballet master-in-chief Peter Martins left his position as director of the New York City Ballet (NYCB) and School of American Ballet (SAB) due to investigations of harassment and violence towards dancers (Pogrebin, 2018; Escoyne,2018b). Journalist Adam Lusher (2018) drew attention to a NYCB ballerina who filed a lawsuit alleging the sharing of sexually explicit photos of her by male dancers of the company. Moreover, journalist Henry Samuel (2018) addressed the fact that most ballet dancers from Paris Opera Ballet (POB) were either victims of harassment in the workplace or had seen a colleague mistreated, while twenty-six per cent had suffered sexual harassment or had witnessed it. A further example, by editor of *Dance Magazine* and *Pointe*, Madeline Schrock (2018), revealed a class action lawsuit by ex-dancers of the Royal Winnipeg Ballet against a teacher and photographer for sexual harassment of minors. Considering this brief list and the recent allegations, these many articles published in the mainstream press and dance magazines, demonstrated the existing power relations between hierarchical positions at ballet companies and schools which affect dancers in

[56] These allegations by dancers went viral in social media and a website platform was launched by dancer and activist Frances Chiaverini (2018) for dancers to communicate anonymously their experiences in ballet class. The online platform has the purpose to provide a space for discussion and empowerment of dancers and to dismantle oppression in ballet institutions. Although it is not a plausible excuse for this type of disrespectful behaviour, some abusers excused themselves by saying they replicate the abusive training environment they have experienced themselves in ballet class (Lusher, 2018).

ballet practices, including the use of touch in class. Dancer and writer Lauren Wingenroth (2018) argues that dance cultures make it uniquely difficult for artists to speak up. Wingenroth (2018) provides resources for preventing and reporting sexual harassment in dance, claiming that ballet companies are not ready to address inappropriate touch and sexual harassment.

Whilst this is not the focus of my thesis, it is important to address this matter as the power relationships instilled in ballet cultures enable a space of manipulation through violent or abusive touch. According to anonymous testimonies by dancers on the website created by Chiaverini (2018), the ballet culture of subordination and competition sometimes can lead to a disrespectful work environment. For this reason, Chiavieri (2018) suggested, that a simple question asking dancers for their consent to be touched in class gives them agency and the power to decide if they want to be touched. This type of abusive touch was not reported by the dancers in the institutions investigated, however, this does not mean that power struggles do not exist in these classes. The dancers in my research reported being comfortable with the touch of the teachers as a way of providing feedback.

Touch, like visuality, are examples of senses which can contribute to the perpetuation and replication of negative aspects of ballet cultures. It all depends on how touch is used and interpreted. Dance scholar Robin Lakes' (2005) study with artist-educators explored the ballet class as a discipline-based environment, often known by the authoritarian teaching style of many ballet teachers. This type of ballet culture leads dancers to be scared and disciplined into silence, which has a devastating impact on their sensorial ability to learn in class. When looking at the wider picture and contemplating the topic of touch there is a need for change in ballet cultures. The existing power structures in ballet cultures and authoritarian pedagogic methods through which dancers are educated disempowers them sensorially. For instance, in my study, the individualised space/*kinesphere* of the ballet class allowed for teachers to touch and sometimes for the dancers to self-touch, but mostly did not allow the dancer to decide what they wanted to touch. This change involves accepting and utilising more touch as a

means of learning in class and applying mechanisms open to anonymous complaints, which could help defeat the dissemination of violent and abusive touch.

3.4 Summary of Chapter 3

In my study, dancers felt inspired to discover their bodies, both physically and emotionally, when teachers offered possibilities to experiment in ballet class through touch. The social values related to the use of touch that dancers experienced in ballet class were culturally-specific and particular to each institution I visited. The ballet dancers at ENB, BB, and DW perceived different modes of touch in ballet class, individually experiencing a shifting sensorium. For example, in the same class, the dancer that is touched by the teacher can prioritise that feeling, while the other dancers not experiencing such touch can prioritise visuality.

All the variants of touch described in this chapter indicate that these combined elements impact the dancers' sense of kinaesthesia, emotional states and their sensorium. Although most people physically have a similar sensorial apparatus, its use and meaning depend on their cultural traditions. Geurts' (2002) study of how people perceive with their senses in different cultures inspired me to consider the many types of touch dancers experience in various ballet classes. For Geurts (2002:53), people have the potential to distinguish between 'kinaesthesia, proprioception, pain, temperature and touch'. Different cultural traditions about the sensory domain of tactility can lead groups of people to categorise the senses differently. For example, 'many Euro-Americans tend to categorise thermal and tactile receptors as touch', while pain is out of the scope of the five senses and proprioception is connected to muscular sensations (Geurts, 2002:53). Various groups of people in their social relations value the senses differently (Howes, 2013).

Touch is felt through the skin and characterised by sensations of temperature, pain/pleasure, pressure and texture (Classen, 2012). For Howes (2006), culture plays an

important role in the person's perception of the senses. Howes (2018:226) claims that the 'skin is intersensory' because it can be seen, smelled, and touched on its surface. Based on the data discussed, the dancer's intersensory quality of touch involved the perception of two or more sensory systems, for instance, visual and kinaesthetic stimuli. A study from a field different discipline by scientist and physician Carin Berkowitz (2014) looks at Charles Bell's students in Britain and provides a useful example of intersensory experience. Berkowitz (2014:377) explains that surgical students were required by Bell to learn how to 'see' with their hands, by mapping the body of the patient with their fingers. This type of intersensory knowledge serves as an analogy to understand the way most teachers used their hands to touch the dancers and feel their muscular response to their guidance, or similarly, when dancers touched their own bodies for proprioceptive awareness (as exemplified in sections 3.1 and 3.2).

Devos (2018), argues that the skin is a space of affective and sensorial encounter with the other. The dancers from the three venues discussed different affective responses in relation to their skin and their haptic relationships depending on varied stimuli of each ballet class culture and their personal experiences. This finding is consistent with the premise by Kinnunen and Kolehmainen (2019:30) in which the intersensorial quality of peoples' skin registers 'affective repertoires' related to touch based on their personal experiences.

In the process of retaining knowledge of the desired technique, dancers internalised ways of doing a step or movement in class through sensorial and emotional states, such as deep touching. At ballet classes, dancers saved and recalled haptic sensorial engagements (combining tactile-kinaesthetic-visual-aural memories of movements' quality, with details of their path, dynamic, effort, and weight). As revealed in this chapter, touch as a haptic sense is often associated with other sensorial modalities. The dancers' perception of touch was considered as part of cross-connected sensorial modalities and part of their sensorium as a multisensorial learning. Santos' (2018:100-101) concept of '*corazonar*' and Borda's (2015:10) notion of '*sentipensar*' (feeling-thinking) helped me to establish these connections

between the senses as both investigate people's ways of knowing inscribed in social relations by combining the feeling/thinking, reason, and love in emotions/affects/reasons with a deeper understanding of the confluence of various senses.

Chapter 4 – Visuality: culturally grounded vision in ballet class

This chapter explores the dancers' visuality in class. The chapter offers a decolonised perspective of how dancers use their sight to learn. The ballet class is a site of visuality in which dancers look at the teacher, space, other dancers, at themselves in the mirror, directly at their bodies, and see visual images in their imagination. Following Santos' (2018) notion of deep sensing and Rose's (2001) notion of visuality, I considered the participants of my study as social subjects who experience seeing in different ways and may expect to be seen on their own terms. For this reason, I viewed the members of the ballet class as a social group through a 'perspective of deepness' (following Santos). What I saw through my own observations may be invisible to the participants as subjects as they visually articulate and understand movement through their personal and cultural experience.

Rose (2001) argues that there are individual ways of seeing and imaging, articulated through power relations in different cultures. Although the theory of the modern paradigm of sight proposed by Merleau-Ponty (1964a) includes the reciprocity of seeing and being seen, it disregards non-European and other contexts, bodily cultures and power relations. Merleau-Ponty's (1964a) theory is problematic as it presupposes a universal human characteristic, which operates in a monolithic way. In contrast, Santos (2018:171) proposes 'deep seeing' as a methodological tool for investigating sight. Santos (2018:170) considers 'sight' as 'one of the senses most in need of being decolonised'.

The literature and my ethnographic study demonstrate how ballet dancers use visuality with various purposes in class. The dancers learn through different ways of seeing as part of the culture of the ballet class, forming their sensorium. In what follows, firstly, I analyse the dancers' ways of seeing when they follow the instructions given by the teachers. Secondly, I examine the dancers' ways of seeing in class, their visual imagination, and their use of visuality as an internal way of 'seeing'. In the final section, I discuss how visuality is part of the

dancers' multisensorial learning based on significant use of the sight-based approach in teaching in the institutions investigated.

4.1 Dancers' visuality after the teacher's instructions

In my observations, participation and interviews, many ENB, BB, and DW teachers guided dancers where to look in class. For instance, teachers commented on the dancers' use of the mirror, which parts of their bodies they may look at, and how to use their gaze during movement execution. Additionally, teachers explained how to blend the dancers' focused and peripheral vision, infusing the movement intention with visual imagery and guiding dancers in exercises with their eyes closed.

In most classes, dancers received instructions from the teachers to direct and give intention to their vision by accompanying movements of the arms or head positions in the combinations. For example, BB teacher Charlotte Broom instructed dancers to use their eyes to follow their arms in the *ronds de jambe* to transmit intention to the movement (BB Class 5). Similarly, teacher Louise Bennett instructed the DW dancers to keep their head and eyes in the same direction in a *pique soussus* (DW diary, 11.01.2018). In another class, Bennett explained how the dancers should use 'their gaze with intention and expression' in the direction of the arm in *arabesque*, by imagining they are trying to reach someone who is far away (DW diary, 18.02.2019).

The ways dancers use their sight in class are socially constructed and often taught by the teachers. DW teachers, Roberta Marquez and Sander Blomaaert (both trained at Royal Ballet school), taught dancers to use their sight for different purposes, such as aesthetic intention and practicality to move in space. Marquez observed some dancers balancing in *arabesque* and spotting[57] with their eyes focused on the floor and she immediately explained

[57] Spotting in ballet is a technique, that dancers use to maintain balance and direction when turning. In this process, dancers focus their eyes on a set 'spot', maintaining eye contact on it, while beginning to turn the body

that, according to ballet technique they 'should train' to focus their 'gaze upwards' (DW diary, 25.09.2017). In relation to spotting, Blomaaert emphasised to the dancers the need to quickly direct their head movement and gaze as soon as they left the preparation of the turn (DW diary, 05.02.2018). Blomaaert explained and demonstrated how dancers may use the arm position, and direction of the eyes and head to spot, thus providing a stronger impetus for the turn. In these examples, the dancers shifted their gaze as directed by the teachers.

In contrast, my observations showed that some dancers' habits of focusing their eyes on the floor in the class were carried over onto their stage performances. For example, during separate performances at the Sadler's Wells, in order to balance in the choreography, an ENB principal dancer (dancing *Song of the Earth*) and one junior soloist (dancing *In the Middle, Somewhat Elevated*) both focused their gaze on a diagonal spot on the floor far away. In the classes I observed at ENB, and one class I participated in together with these two dancers at DW, they had the same habit of focusing their gaze to on floor to balance (ENB Class 1; DW diary, 02.04.2018). These findings demonstrate that the way the dancers used their senses in class impacted their performance on stage. Although such use of gaze may be a demand of a particular choreographer or staging expert, it is still interesting to note the relation between the dancers' use of gaze in class and what was subsequently seen on stage.

Dancers learn to locate themselves and direct their movement in space according to the ballet methods and schools some of their ballet teachers followed. According to Warren (1996:355), dancers learn to number parts of the room[58], associating different imaginary numbers with the walls or corners of the studio for orientation. These practical ways show how dancers' vision is socially constructed, impacting their senses and reasoning. Furthermore,

keeping the focus until the last moment before they whip their head around, ultimately reconnecting the eye focus to the same spot.

[58] According to Warren (1996:355), in the Vaganova's method, dancers start counting by facing the front (mirror) label '1', and label each point clockwise. The front righthand corner is 2, the righthand wall is 3 and so on. Dancers in the Cecchetti's method start numbering the corners of the room from the front righthand corner and go counter-clockwise (1-4). The front (mirror) is labelled 5, and the rest of the walls are numbered counter-clockwise. While dancers at RAD, begin by numbering the walls in a clockwise direction, and then number the corners.

teachers who followed Cecchetti's method taught inclined head positions in five types of *arabesques* (DW diary, 13.10.2016; DW diary, 26.09.2018). Those who followed Vaganova's method taught variations on the directions of the dancers' gaze in four types of *arabesques* (ENB Class 6; DW diary, 30.10.2017). These examples indicate that some principles of the dancers' eye movement in the ballet classes continue to follow principles of ballet methods of Blasis (1830), Cecchetti (Guest and Bennett, 2007) and Vaganova (1969 [1946]).

The coordination and direction of the dancers' eyes are a vital part of their expression in ballet technique. For instance, Vaganova (1969 [1946]) suggests a slight rotation of the shoulders along with a counter-rotation of the head and eyes, emphasising a two-dimensional position in *épatulement*. In the Vaganova ballet manual, the shape of the dancers' arms determines their head position, eyes, gaze and visual expression. The position of dancer's head and eyes respect the direction of the movement *devant, derriére* or *a la second*. In this approach, the dancer in *croisé, ouvert* and *effacé* positions at the barre or centre exercises may look over the gesturing hand with the head slightly up, or under the hand with the head slightly down (Vaganova, 1969 [1946]).

The teachers in my study often guided dancers particularly to look at themselves in the mirror, in case they needed to see their lines for self-correction. At DW, teacher Larkings (interview, 20.05.2018) explained how she corrected dancers to not look at themselves in the mirror during the movement execution because it destroys their line and expression. Moreover, teacher Anna du Boisson told dancers that 'the direction' of their gaze during turns has 'to be clear' (DW diary, 11.01.2018). In contrast, in ENB and BB classes, when the dancers looked down at their bodies, such as their feet during exercises, the teachers did not say anything (ENB Class 7; BB Class 5). Some teachers at DW saw dancers looking at themselves during combinations and instructed them form a habit of following their arm movements with their eyes and apply intention (DW Class 13.10.2016; 22.11.2018; 11.12.2018; Gibbs, interview, 30.05.2018). For example, teacher Bailey (DW and BB), who followed the Cecchetti's method, transmitted this method to the dancers in his classes.

For Woolliams (1978:61), who follows the Vaganova's method, when dancers look down at their feet, their chin drops, impairing their stability, balance, and the correct alignment of their head. In my study, in most of the classes the professional ballet dancers learnt to move their eyes often as a conscious act prompted by the teacher's instructions and then apply this continually. After repeated practice, sometimes the dancers' eyes movement can become habitual.

The teachers who demanded clarity and direction of gaze also guided dancers to use peripheral vision to map the space surrounding their kinesphere so that they were aware of what was happening around them in class. Teacher Clare Freeman-Sergeant (interview 13.04.2018), argued that dancers need to observe their surroundings through peripheral vision during the exercises because it helps to prevent collisions and injuries. This means teachers advocated for the use of both direct and peripheral/indirect vision as blended visual methods. This is similar to Santos' (2018:171) notion of 'deep seeing' which connects the concept of depth in the optical sciences and 'the possibility of creating three-dimensional visual perception', such as perspective, size and scale.

Dancers were also guided by some teachers to use visual imagery to help them feel the sensation of movements. BB teacher and dancer Damien Johnson (interview, 06.04.2017) explained the use of visual imagery as an effective approach to movement, a technique he learnt from his previous teacher. Firstly, Johnson demonstrated the exercise or used a dancer as a model to detail the movement's dynamic and tempo, whilst the other dancers observed. Secondly, the teacher guided the dancers to close their eyes and create vivid visual images of the movements in their minds. Finally, dancers performed similar movements to those they had observed and imagined (Johnson, interview, 06.04.2017). Similarly, BB and DW teacher Nina Thilas-Mohs, first demonstrated the *balance passé* as a position to show how visually stable and accommodated it could look (DW diary, 07.04.2017). Secondly, she guided dancers to create a visual image in their minds of a straight line, pulling the weight of the body through the top of the head up towards the studio ceiling. Thilas-Mohs showed the difference

in the intention between the *balance passé* as an accommodated position and a movement that is continuously growing upwards. Teacher Anna du Boisson explained to dancers they should anticipate, and 'always think ahead' their movements through the creation of visual imagery in their minds (DW diary, 11.01.2017). This relates to Salosaari's (2001) study on the use of mental images in ballet pedagogy, which helped ballet dancers in class to creatively interpret the ballet vocabulary and improve their proprioceptive sensations.

Visuality, imagination and kinaesthesia were related in the ballet classes investigated. Apart from visually seeing, dancers can close their eyes during parts of the exercises in class as requested by the teacher as a way to 'think' visually. In these cases, the ballet dancer's visuality is connected to their balance and kinaesthesia, constituting a multisensory experience. In my study, the dancers rarely experienced exercises with their eyes closed, however, it is relevant to discuss this peculiar ballet pedagogic tool. From the perspective of BB teacher Damien Johnson (interview, 06.04.2017), the purpose of occasionally working with the eyes closed is to create visual imagery in the dancers' minds or to memorise exercises. Yet, dancers also close their eyes when instructed by the teacher as a strategy to enhance their kinaesthetic feeling, for instance, to *balance*. Only the teachers Rose Alice Larkings at DW and Sarah Daultry at BB proposed exercises where dancers closed their eyes in certain parts of the barre, as a resource to test their balance and kinaesthesia instead of depending on visual cues.

Most professional ballet dancers at ENB, BB, and DW preferred to *balance* with their eyes open, indicating a sight-based approach to learning in the ballet classes (ENB Class 4; DW diary, 23.12.2017). This aligns findings by dance scientists Kimberley Hutt and Emma Reading (2014) whereby ballet dancers shifted their focus from visual cues to kinaesthetic sensations when teachers include closed eyes exercises or multiple and complex exercises. My findings indicate that when dancers close their eyes there is a loss of the visual input from the directional points they use to locate themselves in space impacting their equilibrium and

proprioceptive awareness. For this reason, Light (interview, 10.04.2018) discussed doing extra exercises at home with a mobile platform to train her muscles, proprioception and her *balance* with eyes closed.

When dancers close their eyes it helps them to visualise images of movements or steps in their minds that they saw previously and to recall them in their memory. According to Hutt (2015), the space of the ballet class affects the dancers' visuality and other sensorial modalities, such as balance, depending on the way they engage with the mirror and the lighting, among other aspects. In contrast, Batson's (2008) quantitative study found that ballet dancers do not perform well when their sensory conditions alter the environment of the class. Based on my findings, I agree with Batson (2008:36) that when dancers close their eyes in the professional ballet class they 'shift the tendency to depend on vision for motor control' because it challenges their habitual responses to rely on the interconnected sensory modalities of vision and kinaesthesia. Although these scholars have opposite opinions on the use of closed eyes in ballet class, both suggested that the dancers' use of vision is associated with their kinaesthetic feeling or visual imagery. This deep sensing (Santos, 2018) constitutes ways of knowing which are useful to understand how dancers learn the ballet technique. In what follows, I describe how dancers use their visuality in class as a tool for learning, beyond their teachers' guidance.

4.2 The dancers' ways of seeing

The dancers use their vision in myriad ways in class and process information from the environment to learn. In observations of the professional ballet classes at ENB, BB, and DW dancers sometimes looked for validation of their movement execution from the teacher and expected to receive feedback (ENB Class 3, 5,6; BB Class 4, 5, 7; DW diary, 26.04.2019; DW diary, 02.04.2018). In interviews, some dancers noted that the teacher's gaze may have

constituted a form of control in class (Alves, interview, 12.04.2018; Freeman-Sergeant, interview, 13.04.2018). Some of my findings are consistent with Pickard's (2015) study with students in ballet class. Pickard (2015: 36) found that the teacher's gaze may function as a 'powerful form of control' towards the dancers, who in turn seek a 'positive response' from them.

Ballet dancers learn to see their bodies associated with a sense of the movement and evoke feelings or emotions about the image of their bodies. In my study, dancer Gibbs (interview 30.05.2018) reported looking at the teacher's demonstrations and using visual images in her mind to create a line in *arabesque*, directing her gaze and chin upwards to give expression to her movement. This example aligns with Ravn's (2016:76) study in which professional ballet dancers' visual abilities related to their movement as 'a register of the felt body'. Ravn considers this as a concept of 'movement-vision', whereby dancers' complex visual components assist them to expand a sense of bodily engagement with space. For Ravn (2016:76), dancers direct their 'eyes and the sense of seeing into different body parts'. In my study, I consider the dancers' ways of seeing and their ways of sensing kinaesthetically the movement registered in their bodies constitutive of their multisensorial learning in ballet class.

Across all three institutions, I noted that dancers observed other dancers as a form of visual engagement to learn. Most professional dancers acknowledged observing their peers to learn and improve their own movement (Larkings, interview, 20.05.2018; Alves, interview, 12.04.2018; Coracy, interview, 13.04.2018; Freeman-Sergeant, interview, 13.04.2018; Gibbs, interview, 30.05.2018; Light, interview, 10.04.2018; Marquez interview, 22.02.2017; Morris, interview, 21.02.2017; Robinson, interview, 16.04.2018). For example, dancer Clare Freeman-Sergeant (interview, 13.04.2018) described how she is inspired to refine her movement when she observes other dancers. For dancers, this mutual observation created a sense of 'healthy competition' in class stimulating them 'to do as well as the other' (Marquez, interview, 22.02.2017; Johnson, interview, 06.04.2017). This relates to a visual sensorial engagement which leads to the cultural construct of a ballet class.

For Cira Robinson (interview, 16.04.2018), the BB company is relatively small and learning from other guest-dancers (from other ballet companies or independent practitioners) was valuable and greatly contributed to her learning. The guest dancers came from 'different environments' and brought 'different voices to the studio' through their individual quality of movements inspiring Robinson to move in new ways (interview, 16.04.2018). The mixture of different experiences and personalities between a group of dancers interacting in the class enables them to share embodied knowledge and learn to move differently from the way they habitually do.

In the dancers' observation of their colleagues, it was interesting to notice a particular gendered engagement. Two dancers, on from ENB and one from BB preferred to observe the men in class because they applied different ways of doing movements than women (Oliveira, interview, 14.03.2017; Light, interview, 10.04.2018). Fernanda Oliveira (interview, 14.03.2017) explained how men 'made jokes' in class, communicated 'with their eyes', laughed, made her feel 'relaxed', and 'more confident', in contrast to the competitive[59] environment of the women's class. Oliveira observed this competitiveness through the way dancers looked at her. Furthermore, both dancers agreed that the male dancers' creativity to execute movements was inspiring in class.

At the ballet institutions there was a peer relationship, which played a role in the transmission of bodily knowledge between dancers. Apart from the 'official' corrections given by teachers, on some occasions, dancers helped their peers informally, as external observers. After years of professional experience, dancer Deirdre Chapman (interview, 30.03.2017) started to observe other dancers in order to offer assistance and improve their movement execution. This sort of collegial feedback from peer to peer was mostly hierarchically based and this social structure affected the class in terms of culture. For example, at ENB the hierarchical structure was diffused in ballet class when the director and lead principal dancer,

[59] In conjunction with current reports of English National Ballet, this dancer's report of feeling pressure in the dance company environment highlights social, cultural, and political tensions at ENB, as also noted journalists Kate Buck (2018), Connor Boyd (2018), Teresa Guerreiro (2018), and Mark Brown (2018).

Tamara Rojo attended the daily class with the company. After Rojo completed the combination, she walked to the corner of the studio to assist a *corps de ballet* dancer with her *passé*. The experienced dancer visually checked her peer's movements and provided tips about the rotation, amount of pressure, set of working muscles, shape, and effort required. In this case, the transmission of embodied knowledge, the know-how from an experienced dancer to a *corps the ballet* dancer in class occurred through explanation, visual demonstration, observation and touch (ENB Class 4). Apart from the use of their visuality, dancers used other sensorial modalities to share knowledge. Some dancers negotiated the values disseminated by the members of the institution through the cultural construction of ideal dynamism, effort, or body placement. This happened in the centre exercises where dancers could observe one another because they were divided into groups to execute the combinations.

Dancers internalise and learn a ballet aesthetic and ideal body image through their engagement with members of the class. Jose Alves (interview 12.04.2018) explained how the use of peripheral vision made him aware of the 'looks' and 'whispers from other dancers'. As a result, he felt distracted and experienced negative emotions from the social pressure of his peers' looks (Alves, interview 12.04.2018). The dancer's vision worked to sense social pressure from other people in the class, as a type of surveillance. For Foucault (1997:175), members of a group learn the norms of 'discipline' established at an institution. The dancer's self-surveillance and acknowledgement of surveillance by others in class aligns with Foucault's (1997) principle of discipline and punishment at schools through relations of power. In the case of the ballet class, dancers use visuality as a mechanism of control, to monitor others, as a means of self-surveillance, and awareness of surveillance by teachers and peers.

From their early dancing lives, ballet dancers learn to look at their movement in the mirror in class. In my study, most ENB and DW dancers habitually looked at themselves in the mirror in order to help them visualise and apply shapes and angles according to the ballet aesthetics disseminated in their institutions (BB Class, 10.04.2018; ENB Class, 25.04.2017;

DW Class, 17.07.2017). The mirror may constitute a visual input for dancers to visually check their alignment as well feeling it kinaesthetically. For example, dancers 'check' the aesthetic of a movement, such as the line of the pointed 'feet' (Johnson, interview, 06.04.2017), or their 'pointe shoes' (ENB Class 4).

It is important to pause and explain the diverse arrangements of the mirrors in the ENB, BB, and DW classes. ENB's facilities had two main studios with two mirrored walls. The atypical 'L shaped' studio at BB in 2017 had half of the wall with mirrors and since 2018, the new BB studio had one wall covered with mirrors. The DW studio had two mirrored walls opposite to each other. The arrangement of the mirrors in the studios offered dancers different visual angles of themselves (frontal, sideways, back) and impacted their learning. For example, dancers looking at their movements in the mirror, as well as looked at other dancers' movements (ENB Class 4; BB Class 2).

At the ENB studios at Markova House, dancers had double mirrored walls opposite to each other, enabling them to see two angles of their movement nearly at the same time, for instance, front and back of the body (ENB Class 1; ENB Class 2; ENB Class 3). On the other hand, the ENB dancers also had ballet classes in spaces without mirrors. Mirrors were absent in the on-stage ENB classes and often many dancers made mistakes in the combinations and did not finish their movements (ENB class 5; ENB Class 6; ENB Class 7). On some occasions in the on-stage classes, dancers did not fully memorise the combinations during the centre and could not rely on the reflection of their peers' image because there was no mirror. These dancers lacked confidence in their movements when compared to the studio classes where they had the support of the mirror. In this context, the absence of the mirror impacted some dancers' movement execution and learning. Dancers did not have mirrors during their on-stage performances, and thus they needed to practice kinaesthetic awareness without this re-source.

The visuality in BB was distinctive because of its particular studio space. This was part of the cultural makeup of its ballet class. In the previous building, the studio space was

smaller with an atypical 'L'-shaped layout. In some ways, the studio altered the dancer's perception of the space and their position in it. In this studio, only half of the walls were mirrored, thus the dancers learnt to work with a limited view of themselves in the mirror. As a result, BB dancers subjectively felt that they developed a higher level of kinaesthetic awareness or internal feeling of the movement (BB Class 1; BB Class 2; BB Class 3; BB Class 4). For this reason, the BB teachers were the only ones among the three institutions that frequently created combinations in the centre, changing directions and exploring many points in space. As a dancer, Coracy (interview, 13.04.2018) appreciated that 'not all exercises faced the mirror', enabling her to practice the 'change of directions during the sequence'. As a result, Coracy explained that the BB dancers trained their kinaesthetic 'intelligence' and moved 'fast' in different directions. Dancers' kinaesthetic knowledge relates to their skills of feeling the movement. All dancers require kinaesthetic knowledge in on-stage performances without the use of a mirror. The dancers' accounts and my observation suggest that working without a mirror in class may increase speed, enhance dynamic qualities, and kinaesthetic awareness, in particular when teachers create combinations with a change of directions in space and exploration of the dynamic of the music. Further research would be needed to investigate this correlation; however, this is beyond the scope of my study.

These interesting examples showed how visuality as a cultural constitution of vision (Rose, 2001) may be linked to the visual imagery of the movement with or without the mirror. In interviews, BB dancers explained that the long-term (approximately a decade) absence of mirrors on most of the walls at the 'old studio' have positively influenced their self-confidence in movement execution and liberated on-stage performance. Such an internal and emotional impact was still related to visuality through visual-kinaesthetic images of movements that dancers retained in their memory from the daily class as a practice (Johnson, interview, 06.04.2017; Robinson, interview 16.04.2018; Coracy, interview, 13.04.2018). However, after BB changed location in 2018, dancers moved into a spacious studio with a large, mirrored

wall. At the new studio, BB dancers relied more on the mirror to check the aesthetic of their movements (BB Class 5; BB Class 6; BB Class 7).

In contrast to the ballet companies, the DW studio has two mirrored walls opposite to each other, offering dancers frontal and sideways angles of themselves in the mirror. In my study, most DW dancers relied on the mirrors to see themselves, as well as to observe other dancers as an aid to help them remember parts of the exercise. The analysis of the use of visuality at DW is similar to the ENB on-stage class. Some DW dancers made mistakes when they executed sequences without the support of the mirror (DW, 23.12.2017).

The mirror may serve as a useful resource to help dancers learn the movement kinaesthetically. Gibbs described the mirror as a helpful external resource, for instance, to find the placement of her leg in the second position *en l'air* and save a 'photograph' of the 'right' placement in her mind, as a memory 'to be used again' (interview 30.05.2018). This example is in line with findings by sports scientists Francine Hugel et al. (1999) whereby visual inputs help professional dancers to achieve specific postures of classical ballet and balance.

Professional ballet dancers continuously adjust the aesthetics of their movements modifying their feeling of them. However, after years of professional practice, BB dancer Robinson only felt 'secure' when she checked her movements in the mirror in class and noted the need to 'feel' the movement more instead (interview, 16.04.2018). Similarly, DW dancer Larkings explained that expert dancers 'on a technical level should' focus more on 'feeling' instead of relying on the visual image in the mirror (interview, 20.05.2018). In these examples, the professional ballet dancers became aware of the visual memory of their movement in the mirror. Yet, dancers felt the need to shift their focus of attention out of the mirror, to focus on their kinaesthetic sensation and memory.

With reference to this, Ravn (2016) found that ballet dancers are aware of their visual sense and their sense of movement during the process of checking themselves in the mirror. For Ravn (2016:69), dancers look at their bodies in the mirror as way of forming a counterpart to their 'sensing from inside', an internalised sense of movement. Professional ballet dancers

may profit from the visual image of themselves with the use of the mirror, for instance, to check on their alignment or to balance. Relating to this, Angela Notarnicola et al. (2014:429) study with young, female ballet students explains that balance is considered 'a complex function achieved by multi-sensory integration of visual, vestibular and somesthetic afferences, central motor control, and context-specific response generation'. In my study, in order to balance, dancers use visual-kinaesthetic-vestibular-breath-weight sensorial modalities in a multisensorial learning.

In a process of self-surveillance dancers from the three institutions alternatively looked directly at parts of their bodies to self-check their movements' aesthetics (ENB Class 1; BB Class 4; DW diary, 02.04.2018). For example, Robinson described looking at her feet, legs, and arms to check her alignment and how her 'right leg was more turned out (*en dehors*) than the left' in the '*tendu* to the side' (interview, 16.04.2018). In this process of self-surveillance, dancers work to achieve a similar visual aesthetic shape on both sides of their bodies, following the ballet principles they learnt. These principles suggest dancers should visually look as symmetrical as possible when comparing the right and left sides of their bodies. This dancer talked to herself in her mind 'to think' about on improving the visual aesthetics of her *tendu* on the left-hand side. Often dancers compared the image they saw of their bodies to an idealised visual image in their minds of how they should look like, learnt in their ballet classes.

Dancers looked at themselves analytically with the purpose of self-correcting, checking whether their movement shapes were executed based on their interpretation of ballet technique. Alternatively, some dancers explained how they looked in the mirror to locate themselves in space, to avoid colliding with other dancers. In particular, this was a resource to obtain a visual image of a movement, which they can retain to develop a proprioceptive sensation that may be stored as a memory (Alves, 12.04.2018; Robinson, 16.04.2018). Dancers may then feel a particular memorised movement, with or without looking at the mirror.

The ballet dancers' sense of seeing their bodies was connected to their kinaesthetic sensations of the movement. My findings indicate that the ballet dancers' multiple visual-kinaesthetic sensations of movements and steps may influence their emotional states in class, and therefore their learning. This multisensorial learning is associated with the notion of Santos (2018) deep sensing and feeling emotions as ways of knowing.

4.2.1 The 'ideal' ballet body and visuality

In the process of self-surveillance, some dancers reported comparing the image they saw in the mirror or by directly looking at themselves, with a socially constructed dancer's 'ideal' aesthetic body disseminated in their ballet cultures (Marquez, interview, 22.02.2017; Johnson, interview, 06.04.2017; Light, interview, 10.04.2018; Robinson, interview, 16.04.2018; Larkings, interview, 20.05.2018). This 'ideal' aesthetic of how the dancers should look, principally triggered destructive behaviour in them. This finding related to visuality aligns with Hsu's (2008) premise of the social construction of sensory experience in a particular dance group and with Featherstone's (2010:194) concept of body image as a visual 'mirror-image mode'.

It is important to briefly explain the notion of 'ideal' ballet body and technique which is culturally transmitted to professional dancers by teachers, rehearsal assistants, other dancers and choreographers throughout their careers. In this respect, Grau (2011) and Ravn (2016) describes how ballet dancers constantly work to achieve an 'ideal' ballet body. This type of dancer's body entails a sense of alignment, placement and control of their movement. Moreover, these visual body images are disseminated in class, nurturing how a ballet dancer should look (turned out, symmetrically aligned), or move (effortlessly, precisely).

In this process of self-surveillance to fit the 'ideal' ballet body, many dancers undergo an objectification of their bodies, affecting their emotions and self-esteem. According to Green's (2002-3) investigation on this topic within an academic dance setting, the dancers'

self-surveillance on the mirror is constantly practised and encouraged by teachers as disciplinary actions in ballet technique. In my study, ballet dancers are overtly critical when looking at themselves because they try to achieve an idealised ballet body image. In class, ballet dancers experience a body that is both perceived and tangible, and a body that is aesthetically 'ideal': light, quick, precise and strong.

Damien Johnson (interview, 06.04.2017) described feeling 'nervous' when looking at his foot in the mirror, avoiding 'to look at it'. For Johnson, his foot's aesthetic must fit an 'idealisation of foot' learnt from his teachers and peers. Some of the professional dancers expressed caution on their use of the mirror after catching themselves scrutinising their movements and bodies' shapes (Marquez, interview, 22.02.2017; Johnson, interview, 06.04.2017; Robinson, interview, 16.04.2018; Larkings, interview, 20.05.2018). The mirror had a positive effect on dancers when it aided self-correction and a negative effect when they over criticised themselves when comparing their image in the mirror with an unattainable 'ideal' body image.

In interviews, many dancers explained how they learnt culturally that the ideal ballet body was mostly represented as White coloured skin, flexible, skinny and effortless. For instance, since her school education (in Eastern Europe), Light continuously became 'conscious' about the notion of an ideal ballet body trying to 'fight against it, because it is toxic' (interview, 10.04.2018). Although she heard compliments many times about her talent as dancer, her teachers continued to say she could 'be better'. Light explained it was not about a technical issue but 'how heavy' she was, and the colour of her skin (interview, 10.04.2018). Light lives with these persistent messages and images in her mind since her school through to her professional career. In particular, as a female dancer she 'had to lose weight' to look like the stereotyped ballet body. For Light, 'the arts form is about aesthetic', about how a dancer's lines' are seen on stage. Yet, as a professional dancer in a company, Light values more how she 'moves' and 'interprets' (interview, 10.04.2018). Similarly, Alves (interview, 12.04.2018) reported feeling discriminated against because of his skin colour when he moved

to a recognised ballet institution in his ballet education[60] (from Eastern Europe) and in his professional career (at a ballet company in Eastern Europe).

Coracy (interview, 13.04.2018) added that she had to learn how to be a 'Black female dancer'. Coracy (interview, 13.04.2018) explained how she had to learn to like her body and discover how to work with her physicality because of the colour of her skin and the shape of her body, which is different from the majority of dancers in ballet. Apart from feeling discrimination in ballet because of her skin colour, Robinson (interview, 16.04.2018) explained that the social pressure for female dancers to look like a specific body type, for instance, thin, can lead to guilty feelings and cause health problems, such as not eating properly.

These findings are similar to Green's (2002-3:110/111) study in which she scrutinised the qualities disseminated in ballet about the dancer's 'perfect body'. Green (2002-3), however, did not explored discrimination due to skin colour. The discussion of race is not new in ballet. For dance scholar Brenda Dixon Gottschild (2016:136), the assumptions that Black ballet dancers' bodies have different bodily stylistic ability than White dancers are not true, for instance, 'less arched feet'. Among many examples, Dixon Gottschild wrote about Virginia Johnson, who was a former principal dancer and now Artistic Director of the Dance Theatre of Harlem. Moreover, in a public seminar, Virginia Johnson, choreographer Benjamin Millepied, and dance writer Jennifer Homans Johnson (2016) already discussed the need for the inclusion of Black dancers in ballet schools and companies. Similarly, dance researcher Sandie Bourne's (2017) doctoral thesis explored the history of Black ballet dancers in ballet institutions in the UK. Bourne reveals the level of discrimination[61] that dancers suffer and argued for an urgent need for much stronger institutional inclusion of dancers of colour.

In the interviews I conducted, Black dancers and dancers of colour felt challenged by the ideal ballet stereotype, which excludes other skin colours and different body types. BB is

[60] Alves explained that in his ballet education he was positioned at the barre by his teachers according to his skin colour (interview, 12.04.2018).

[61] Although not in the U.K. but in the U.S.A, this relates to one of the films I researched about Misty Copeland (2017; CBS News, 2017). Copeland explained that as an African American ballerina she often heard in her ballet education that she was 'too Brown to succeed in the rarefied and largely White world of ballet' (CBS News, 2017). Despite discriminations, she is now working at the American Ballet Theatre.

a racially inclusive company, and the issue of discrimination was reported by some company members in interviews, in particular regarding their teachers in their ballet education (Robinson, interview, 16.04.2018; Coracy, interview, 13.04.2018; Light, interview, 10.04.2018). Yet, these dancers described discrimination when performing together with renowned ballet companies in the U.K., that hire mostly White dancers, choreographers, teachers, and directors. As mentioned in the Introduction of this thesis, the social movement known as #BlackLivesMatter came to prominence when I was investigating the ballet classes in London[62]. This complicates the notion of the ideal ballet body as a hierarchical and hegemonic imagined/visual image because the dancers of colour in BB explain that different treatment, for example, dress code required for them, was not mandatory for the dancers from other companies who were dancing with them. This made them feel uncomfortable, affecting their visual engagement in ballet class and rehearsals. This impacted the dancer's sensorial learning in class and is an important topic for discussion.

4.2.2 The influence of practice clothes on visuality

In class, the dancers use specific rehearsal/practice clothing, which promote specific images of themselves in the mirror or when they look directly at their bodies. For some dancers, wearing tight clothes in class made them shift their focus of attention from the kinaesthetic feeling of the movement to the visual image of their physicality in the mirror, plausibly comparing themselves to an ideal ballet body image and influencing their emotions. For instance, Rose Alice Larkings felt comfortable wearing loose clothes (trousers and T-shirts) in class because she could focus her attention on the sensation of the movement (interview, 20.05.2018). Larkings noted that when she wore tight clothes, she scrutinised the shape of her body when looking in the mirror and did not feel 'free' to sense the movement (interview,

[62] Journalists Olivia Goldhill and Sarah Marsh already discussed in 2012 the lack of diversity and presence of Black ballet dancers at the ballet companies in London.

20.05.2018). Light reported similar discomfort, when requested by the choreographer, she wore tights, leotard and skirts in class, making her body visible (interview, 10.04.2018). Dancers explained that they constructed a good relationship with their reflected images in the mirror when they had the freedom to choose the clothes they wear.

My findings show that the images dancers see of themselves in the mirror, by looking directly at their bodies and in their imagination, trigger emotions and impact their technique and artistry. In the professional classes at ENB, BB, and DW dancers predominantly wore leotards, tights, or unitards under layers of clothes that were taken off as they warmed up. Previous study on ballet dress code by dance historian Lillian Moore (1960) describes the use of tight-fitting clothes, such as leotards in the mid-20th century ballet class. Later, Tomic-Vajagic's (2014) study explores the strong connections today between dancers' relationships with their bodies in leotards in class and on-stage. In Tomic-Vajagic's (2014) study, the tight-fitting class dress code displays the dancers' nearly bare body in ballet class, making some dancers feel uncomfortable wearing leotards/bodysuits in class, whilst other dancers enjoy it. The dancing clothes may cause the dancer to enter the class or stage from a position of strength/confidence or a position of fragility. In my study, dancers in all three institutions, ENB, BB, and DW, reported feeling more vulnerable or exposed than Tomic-Vajagic's (2014) study in different ballet cultures (RB, NYCB and Ballet Frankfurt/Forsythe). My interviews indicated that when dancers felt less freedom over their clothing choices and their movement, they lacked confidence in their body image, affecting their multisensorial learning in class. The dancers' perceptions of their bodies in tight-fitting clothes influenced their visual and tactile learning

4.2.3 Use of visual imagery as part of visuality

Visual imagery is a useful tool in the ballet class because dancers visually capture sensations associated with feelings that influence their learning. In my study, the dancers retained mental representations in their memory of the movements with their spatial and temporal features.

Some dancers noted improved memorisation when they felt the class was 'fun' and they were not overly 'focused' on the movement execution (Oliveira, interview, 14.03.2017; Light, interview, 10.04.2018). According to Damasio and Carvalho (2013 p.414), emotions such as joy, disgust, fear, anger, sadness, shame, contempt, pride, compassion, and admiration are 'largely triggered by perceived or recalled external stimuli'.

Emotion is both positively and negatively related to the process of reasoning and cognition, such as focusing attention and favouring certain modes of thinking (Damasio and Carvalho, 2013). This idea is important because, in the interviews, the dancers indicated that their previous experiences of movement and their visual imagery were related to particular emotions. These emotions may elicit a collection of past personal experiences that occurred at a specific time and place, affecting their movements' execution in class (Marquez, interview, 22.02.2017; Light, interview, 10.04.2017; Alves, interview,12.04.2018; Larkings; interview, 20.05.2018).

When dancers observe and practice dance movements, they may recall emotions associated with their memories of executing similar movements. In my study, the dancers' awareness of movement execution is linked to the creation of sensory memory, through visuality, touch, kinaesthesia and breathing, and emotional states which can be recalled later. This partly aligns with previous finding by Bläsing et al. (2012) whereby expert dancers embody high-quality movements through sensory and motor processes during repetition in class and performances.

The dancers engage with a 'body image' based on the perceptions, attitudes and beliefs disseminated in the culture of the class, sometimes unconsciously. This reminds me of the studies by philosophers Alva Nöe (2004) and Shaun Gallagher (2017) that explore the

connection of perception and the sensorial. Nöe (2004:2) defines perceptual awareness as an action and thought ‘to understand the effects of movement on sensory stimulation’ in an interactive engagement with the world. Moreover, to be a perceiver ‘is to be familiar with and skilled at coping with the myriad ways in which things look (or feel)’ depending on what one does (Nöe, 2001:51). A person develops skills about sight, touch, or other perceptual modalities, to feel the whole detailed environment (O’Regan and Noë, 2001). Furthermore, Gallagher (2017) explains that perception involves the self-surveillance of movements, the senses, affect and the possibility of taking action upon it. Gallagher (2005) describes how awareness of the body influences experience through conscious movement surveillance and abstract representation of the body. Gallagher’s (2005:24) work provides a distinction between ‘body image’ and 'body schema'. Body image ‘consists of a system of perceptions, attitudes and beliefs pertaining to one’s own body’ whereas body schema is ‘a system of sensory-motor capacities that function without awareness or the necessity of perceptual monitoring’. The dancer’s visual memory plays an important role in movement execution because it helps them to feel the kind of quality they wish to apply to the movement. The dancer’s visual memory is associated with awareness of execution of a movement. Light (interview, 10.04.2018) recalled kinaesthetic and emotional memories from choreographies to help her visualise images in class. From Light’s (interview, 10.04.2018) visual-kinaesthetic memories of performing the choreography ‘*Le Corsaire*’, she recalled in class emotions of being ‘royal’ with a ‘precious’ way of moving to *balance* and the kinaesthetic sensation of lightness from ‘the *balloon*’ of the jump in the air to do multiple ‘*jeté en tournants*’.

This example by BB dancer Light emphasised the importance of recalling emotional and kinaesthetic states from past choreographic experiences to execute movements in class. This example is in line with Hanrahan and Vergeer’s (2001:249) idea that dancers discover, adapt, or construct myriad of images integrating their ‘mind, body and spirituality’ in class. This perspective fits Santos’ (2018) theory of deep sensing. In this case the dancer’s visual images relate to her memories of feeling particular senses, with emotions and reasoning.

The ballet class prepares dancers for choreographies and is the place they learn to use visuality and certain emotions they can express. In observations of the ballet classes, I noticed some dancers looking at themselves in the mirror and touching parts of their bodies to ensure their placement (BB Class 5,7; ENB Class 1,4,7). In interviews dancers described touching their bodies (e.g., the hip), looking at themselves in the mirror (visual image), feeling the placement kinaesthetically and retaining a type of visual-tactile-kinaesthetic memory (Alves, interview,12.04.2018; Robinson, interview, 16.04.2018). Many dancers have a similar habit of creating a visual-tactile-kinaesthetic memory, constituting a multisensorial learning. When the dancer's focus of attention shifts from a visual to a tactile or a kinaesthetic learning, it affects their bodily memories. Additionally, all the dancers' ways of seeing described in this Chapter often registered in their visual memory and may be recalled when needed.

For Blasis (1830:96), the use of visual imagery helps ballet dancers to 'understand the theoretical principles' of the technique and to execute movements. This relates to the study by dance philosopher Sondra Fraleigh (1987) that focused on contemporary choreographies about the concept of bodily knowledge. Fraleigh (1987:172) considers the dancers' ways of doing a movement, the expression of intention, and the use of imagery are parts of their bodily knowledge. Considering that the dancers learn how to move from their bodily lived experiences, my findings are also in line with Fraleigh's (1987) argument that dance involves forms of knowing to express the quality of motion, its aesthetic intent, and the creation of movement imagery. Additionally, my findings align with Bläsing and Schack's (2012) premise that the dance classes increase the amount of kinaesthetic imagery, making sensations more vivid in the dancer's mind. The results of my research are consistent with Parviainen's (2002:13) statement that 'the dancer wrestles with sensations and images of movement, its meaning, quality, shapes and textures, struggling to capture some half-grasped or intuitive complexity of visual-kinetic form'. My findings also support other scholars' work that considers how dancers' use of visual imagery assists their full out performance and may work as a helpful tool to execute movements (e.g., Franklin, 2014[1996]; Hanrahan and Vergeer, 2001;

Salosaari, 2001; Nordin and Cumming, 2006; Roses-Thema, 2007; Kirsh, 2011a; Dowd, 1995). In contrast with previous studies in the field, my thesis illustrates the different ways the dancers use their visuality whilst engaging with multiple senses and transforming their learning of technique and application of artistry. Unlike previous publications in the field, my research shows that the sensorium shifts and their learning process changes incorporating reasoning, emotions, and multiple senses according to each socio-cultural setting and the dancers' unique backgrounds.

4.3 Summary of Chapter 4

There is a myriad of ways professional ballet dancers use visuality in their engagement with the environment of the class at the studios and in on-stage classes. These ballet dancers' ways of seeing are socially constructed and articulated through power relations within the ballet class culture. Visuality relates how ballet dancers see and are allowed to see in class. Vision works as a complex nexus of visuality/not seeing and imagining and is related to dancers' understanding of space, relationships with their peers, and finally and most importantly, to the understanding of themselves. Yet, it is important to consider that the dancers from the three ballet institutions have daily ballet classes in different spaces impacting their senses and learning.

The social construction of vision in ballet class and its cultural significance occurs through social practices that are produced, articulated and can be challenged by ways of seeing and imagining. Foster (1995:6) notes that since the early nineteenth-century, ballet dancers attended 'large group classes where they learnt standardised sequences of exercises with designated shapes which all bodies should conform'. Over the centuries, dancers were required to execute movements with more grace and virtuosity, transforming their physicality (more flexibility, strength and turns, higher jumps, higher leg and spine extensions, longer balances, more complicated rhythmic patterns, beat of the foot, and shifts of weight). Ballet

dancers learn in ballet class to create a mental image of an 'ideal' ballet body and constantly work to achieve an internalised sense of movement which is aligned, placed, and controlled.

Professional dancers' multiple uses of their visuality compose a tacit knowledge, which is dependent on various factors. For instance, on the way the teacher transmits the movements to dancers, the culture of the institution where the class occurs, the dancers' previous experiences and how they learn to move in ballet class. The different ways dancers look become part of the culture of ballet class, compose part of their sensorium, and are means of multisensorial learning. Following Hall's (1997), Howes' (1991), Classen's (2012) and Geurts' (2002) premises of culture, the ways ballet dancers consciously and unconsciously experience the world around them with their senses, feelings, and emotions, structures the way they behave. For example, through the dancers' use of visuality in class, they learn self-surveillance by looking at themselves in the mirror for self-correction, or looking at their body parts to enhance kinaesthetic memory.

Most ballet dancers in interviews described the use of visuality connected to other senses. As discussed in section 4.1, the dancers' use of one sense in the class (eyes-closed) affected their perception of other senses (vestibular sense/difficulty to *balance*) and emotional states (lack of confidence), constituting multisensorial learning. This example aligned with Santos' (2018) definition of *corazonar* creates a hybrid of emotions/affects/reasons. Moreover, dancers created habits and became used to specific ways of moving in class. When the usual way of practising movements or steps in class or the environment changed (different studios, on-stage classes, absence of mirror, eyes closed), the dancers' habitual experiences were challenged resulting in a greater number of mistakes and unfinished movements. These changes made dancers feel out of their comfort zone and often less confident in executing movements and steps in which they are expert.

Many findings in this chapter indicate the ballet dancer's sense of vision interconnected with other senses, forming a type of multisensorial learning. This is consistent with

other scholars' perspectives relating the dancers' seeing associated with, for instance, proprioception or balance. For example, Salosaari's (2001) study with ballet dancers in class suggests that their proprioceptive sensations in learning the ballet technique can improve with the creation of mental images, a type of visuality that goes beyond just looking. In my study, dancers used vision to apply intent to movement expression, deal simultaneously with focused vision, peripheral vision, and manipulate their bodily sensations of proprioception via visual imagery. Additionally, dancers learnt from observing their teachers and peers, and dealt with the visual input from the mirror compared to an 'idealised' balletic body learnt in their social relations in class.

Through the process of using different ways of visuality in class, ballet dancers discover ways of moving connected to other sensorial modalities, as well as reasoning and emotional states. The images socially learnt of the 'ideal body' in ballet discriminate against gender, race, shape, size, and weight and impact the dancer's visual engagement and learning in class. Ballet dancers engage with a kind of cultural knowledge through their movements as ways of knowing (Santos, 2018).

In all London based institutions under investigation, ENB, BB, and DW, the cultural construction of professional ballet dancers' sensorium prioritised a sight-based approach for learning, which needs to change. Other ways of knowing in class must be considered, including other sensorial modalities, for instance, breathing, as well as visuality, kinaesthesia and touch. The inclusion and consideration of multiple sensorial modalities, with a perspective of the dancer's deep sensing may improve their learning in class.

Chapter 5 – Breathing across the senses in ballet class

In this chapter, I focus on the ways in which professional ballet dancers perceive and use breathing in class as an important tool to connect dance movement and rhythm. Although breathing is often not considered as a sense, I am conceiving breathing closely aligned to the senses, following the concept of deep sensing as ways of knowing (Santos, 2018). Drawing on Geurts' (2002) theory, I consider the sensoria not limited by a physical organ or a function of the mind but connected to how people perceive and learn about their surroundings. As discussed in the introduction of this thesis, Geurts (2002) broadened the study of the senses by including other sensorial modalities of the Anlo people's sensorium, such as balance, kinaesthesia, pleasure, and pain. However, Geurts (2002) did not include breathing in her findings. Based on Geurt's (2002) rationale, I consider breathing as a potential way of sensing for dancers because their sensoria vary depending on their engagement with the cultural environment. This observation brings me to the following question: does breathing have cultural meanings for the dancer and how can it be argued as a sense in the environment of the ballet class?

The ballet class enhances self-awareness of the perception of internal bodily signals, such as breathing. The dancers' use of breathing may be associated with their movement execution and musicality in class, forming a multisensorial experience. The dancers breathe through methods of focusing attention on internal and external body states and mental imagery.

As explained in section 1.3.4, Damasio (1999) argues that bodily sensations, such as breathing, heart rate changes, arousal, temperature, hunger, touch, itch, and gut motility arise from homeostatic processes in the body and are linked to the experience of emotions. This process of breathing constantly informs the person of what is going on inside the body in relation to the environment. Damasio's (1999) study is important because it considers breathing as a means to perceive one's own bodily sensations and understand emotions. Moreover, Damasio's (1999) idea aligns with Santos' (2018) notion of deep sensing, which

unites senses with emotions. Both Damasio's (1999) and Santos' (2018) premises are helpful to consider in the context of exploring professional dancers in the ballet class because their senses and sensations, in particular breathing, can be associated with emotions and affect their learning.

Christensen, Gaigg and Calvo-Merino's (2017) rationale, which focuses on the professional ballet dancer's perception of the internal bodily state of heartbeat and emotion, can be transposed to my study to consider the internal bodily state of breathing and emotion as part of the professional ballet dancer's sensorium. Christensen (2016) already pointed out how dancers express emotions in class and develop skills to identify emotions expressed by others, becoming more responsive to their affective movement. Christensen, Gaigg and Calvo-Merino (2017:9) argue that the dance class 'includes the elicitation of – and attention to – bodily signals'/states (e.g., imagery) and the expression of these states and emotions (e.g., intentions), directly through the dancing body. Both Damasio's (1999) and Christensen, Gaigg and Calvo-Merino's (2017) premises help to support my argument that breathing is a perceptual mode of attention which offers information about the interoceptive, exteroceptive, and proprioceptive dimensions of the body, forming feelings. Aligned with these theories, the findings from my interviews, participation in and observation of professional ballet classes demonstrate that the dancers' use of breathing gives a sense of individuality to their quality of movement. Therefore, I examine dancers' breathing as a sensorial means of learning in the environment of the ballet class.

5.1 Decolonising dancers' breathing

To decolonise dancers' breathing means exploring through multiple perspectives how they perceived it in class. This process of perception occurs through the dancers' sensing, feeling, and thinking. My findings indicate that the professional dancers' breathing in class can be understood as a method of agency and control, enhancing the quality of movements. For

example, some dancers learn different ways of engaging with their breathing from options their teachers offer, leaving them to decide what suits them best (DW diary, 19.11.2018; DW diary, 07.04.2017; DW diary, 15.12.2017). In their day-to-day lives, dancers control their bodies through reflexive monitoring to act, changing their movements. This power of action is what I understand as 'agency', following Giddens' (1984:9) concept (discussed in Chapter 1). Breathing can also be considered as a means of rhythm when dancers coordinate the internal rhythm of the air movement in their lungs with the external stimuli from the rhythm of the music.

Outside the ballet technique, Roses-Thema (2007) argues that in modern and contemporary techniques, dancers' breathing is trained in the daily classes to become part of their motor pattern in certain movement sequences. Contemporary and modern dancers are taught in class to pay attention and use breathing in and out (internal body states) to connect to the aesthetic and punctuation of specific movements. In these techniques, the sound of the breath is used deliberately. The dancers' use of breathing creates 'an organising rhythm' and it integrates 'the movements of the body together into a harmonised whole', impacting 'their performance outcome' (Roses-Thema, 2007:115). For Roses-Thema (2007), breathing is more than a physical action of inhaling and exhaling, but an interoceptive sensation which provides the dancer with agency.

Dance scholar Eline Kieft's (2014:40) study of dance as a spiritual practice considers breathing as an intersubjective personal experience which occurs through a physical exchange between the 'interior of the body and exterior of the outer world'. Kieft (2014:40) contends that dancing is a way of knowing that shifts from cognitive into experiential sensory modes and is 'perceived with other faculties, senses or modes of perception'. According to Kieft (2014), to perceive differently, dancers use their breathing associated with inward and outward movements. Breathing enables dancers to recognise themselves 'as part of a direct network of relationships, possibly in a more direct and concrete way than other forms of spirituality' (Kieft, 2014:40). Kieft (2014) and Santos (2018) consider dance as a way of

knowing, one that shifts between reasons and feelings through sensory perceptions. Both Kieft (2014) and Roses-Thema (2007) discuss breathing as an interoceptive sensation associated with movement. I go beyond these studies to consider the dancers' breath as a 'sense', part of their sensorium, and the ways they breathe are associated with their movement, rhythm, and artistry.

Most of the dancers in my study engage with multiple ways of breathing in class, impacting their learning and ways of moving. Breathing techniques help dancers feel the flow of movement execution. For Karsavina (1962:16) breathing helps dancer's muscles to reach a combination of 'strength and suppleness'. Furthermore, as Romita and Romita (2016:2) explain the dancer's breath supports the 'expressivity and artistry in movement phrasing'. Studying the dancer's breathing is important because it provides impulse and rest during movements, releases tension from muscles and articulations and helps with their expressivity.

Based on the literature cited above, there is wealth of scholarly work on dancers' breathing. Some of these studies offer suggestions about the dancers' engagement with their breath in ballet class. However, none of these studies investigate the professional ballet dancer's breathing associated with their learning in relation to the social and cultural environment of the class. In what follows, firstly I examine the dancers' accounts of breathing based on the teacher's stimuli in class in different institutional environments. Secondly, I analyse alternative perspectives from the dancers' accounts of breathing at these institutions. Thirdly, I discuss the influence of breathing on the dancers' learning and how breathing constitutes part of their shifting sensorium, depending on the culture of the ballet class.

5.2 The dancers' breath control in response to the teacher's stimuli

The dancers engage with their breathing and physical sensations in class influenced by the stimuli of their teachers. Depending on the cultural setting of the class, dancers experience breath differently. For Damien Johnson (interview, 06.04.2017) and Rose Alice

Larkings (interview 20.05.2018), the ballet teaching methods used in class can play a role in the process of 'bringing awareness' to dancers in varied ways of breathing.

Dancers at the researched venues executed demanding movements and steps dynamically to the music and sometimes felt breathless or held their breath. In these cases, a small minority of teachers did not help the dancer's with strategies to improve their breathing (DW 24.07.2017; 11.09.2017; ENB Class 4). Nonetheless, when dancers looked tense, most teachers reacted with verbal cues during exercises often saying, 'Breathe!' (DW diary, 12.04.2017; DW diary, 01.11.2017; BB Class 7), or 'Never forget to breathe!' (Light, interview, 10.04.2018). The verbal cues have the purpose of bringing the dancers' awareness and focus of attention to the internal state of breathing during movement execution. From the perspective of dancer Clare Freeman-Sergeant (interview, 13.04.2018), the problem is that many teachers 'take it for granted' that dancers 'know' how to use their breath in class. Similarly, Light (interview, 10.04.2018) pointed out that most teachers did not explain 'how' dancers can benefit from using different ways of breathing.

These examples indicate that the teachers' imperative instructions through verbal cues affect the sensorium of the dancer. For example, during the combinations a dancer is focused on the feeling of the movement coordinated with the music. If they suddenly hear the teacher's voice instructing them to breathe, it shifts their attention to the senses they prioritise in that part of the combination. However, it is not clear from my data whether some teachers intentionally allowed dancers to find their own ways of breathing, as a means of having agency over their bodies, or whether they did not invest time in analysing what type of breathing might be useful for the dancers.

Nevertheless, there are teachers in this study who, based on their prior dancing practices (class, rehearsal, performance), transmitted their expertise, offering dancers alternative ways to breathe and finesse certain movements in class (DW diary, 13.11.2017; DW diary, 15.12.2017; BB Class 5; ENB Class 6). To stimulate the dancers' awareness of breathing in class, BB teacher Damien Johnson (interview, 06.04.2017) created ballet

exercises coordinated with breath management, uniting the phrases of the music with opposite movements of arms and legs.

In the classes I attended, teachers Sander Bloomaert, Nina Thilas-Mohs and Darren Parish demonstrated ways of using the breath to help dancers with movement coordination (DW diary, 19.11.2018; DW diary, 07.04.2017; DW diary, 15.12.2017). For example, Parrish demonstrated eight fast *jetés* using one long exhalation to eight musical counts and secondly, he did one *passé retiré* using one long breath during four musical counts (DW diary, 15.12.2017). The dancers could hear the teacher's breath and compare the dynamics of the *jetés* and *retiré*. After Parish explained the options for breathing and its importance in class, he gave the dancers the opportunity to try for themselves, giving them the agency to discover and practice personal ways of breathing in and out. For teachers Nina Thilas-Mohs and Damien Johnson, dancers must consider the movement aligned with their breathing in and out as an internal state of the body, or press their body weight against the floor to induce the breathing pattern to emerge as an external body state (DW diary, 07.04.2017; BB Class 1, 2, 3).

Another teacher, Dmitri Gruzdev, instructed the dancers to 'breathe in' while going down (in the *grand plié* exercise), 'deepening the *plié* to its maximum' extension with the spine elongated and head straight up (ENB Class 6). Gruzdev instructed the dancers to 'breathe out' when going up and 'pressing the floor' (external focus), lifting the body. According to these teachers, the dancers needed to be aware and control their breathing in the *grand plié* to make the movement execution lighter, whilst they contracted the abdominals and rib cage. Most of the dancers in the classes responded to the teacher's physical gestures by experimenting with the proposed breathing patterns to execute the movement within the musical phrase.

This group of teachers at the ENB, BB, and DW classes who intentionally encouraged dancers to breathe in and out to bring oxygen into their muscles used similar approaches to enhance their movement quality and reduce bodily tension. Often teachers did not teach

dancers technically how to breathe, but some of them guided dancers on how they can use their breath to move. Dancers engaged in the learning process as active individuals, by choosing which breathing technique works best for them following demonstrations and listening to their teachers' suggestions.

Alternatively, some teachers' touch or verbal cue induced an immediate response in the dancer's breathing management. During one class observation at ENB, teacher Loipa Araújo used a tactile correction to approach and stimulate a dancer's breathing. I noticed that the 'soft touch of the teacher at the top of the dancer's head made her breathe in and elongate the spine upwards' (ENB Class 5). In another ENB class, the teacher Gruzdev instructed dancers to focus attention on breathing in the *pirouettes* to extend the suspension of the movement (ENB Class 6). Gruzdev's recommendation was similar to Besobrasova's (1996, cited in Warren, 1996:32) suggestions for dancers to breathe in at the middle of the *pirouette* to help sustain their *relevé*, rather than breathing in 'at the initial moment of the turn'. A similar situation occurred in a BB class. I noticed that dancers listened to the teacher's guidance when she said, 'The top of the head stays afloat', and breathed in to elongate the spine vertically (BB Class 4). Unlike the tactile correction and oral instruction at ENB, at BB, the teacher guided dancers to focus on an external body state, emphasising the dancers' mental imagery of feeling the head suspended in order not to tense their neck, enabling elongation of the spine. These three examples show that the ENB teachers, through touching and explanation, and the BB teacher's guidance through mental imagery, resulted in immediate response through their breath. This is reminiscent of Besobrasova's (1996, cited in Warren, 1996:32) recommendations that dancers use controlled breathing to enhance movement quality through a focus of attention on internal, external bodily states, and mental imagery.

According to Karsavina (1962:70), when dancers pay 'attention to correct breathing' they save much of their strength, such as 'letting out the breath (through the mouth) simultaneously with the relaxation of effort' producing an alight feeling in the whole body. In jump exercises 'the right breathing, the timing of arms and the correct distribution of weight are necessary in

both vertical and travelled elevation to stay up in the air, though the arms and the weight adjustment differ in each case' (Karsavina, 1962:80). According to De Valois' (1977:21) accounts of Madame Nijinska's ballet class, the teacher can become obsessed 'with correct breathing' until it is 'a habit'. Although both Karsavina and De Valois consider a definite approach to body movement, they do not speak explicitly, in detail, about the theory underlining the dancer's ways of breathing related to their learning.

To stimulate the dancer's breathing, Besobrasova (1996, cited in Warren, 1996:32) observed dancers in class, and guided them to be aware of their internal state of breathing by letting 'the air in naturally' and not pulling 'the air in (i.e., gasp)' as if the dancer was 'a vacuum cleaner', thus aiming to reduce their 'bodily tension'. Furthermore, Besobrasova points out that dancers must exhale before performing difficult movements. More importantly, there is no consensus on how dancers should engage with their breathing in class in the literature, for example biographical books of ballet teachers (Karsavina, 1962; De Valois, 1977; Bentley, 1982; Warren, 1996), research by singer and musical theatre performer Joan Melton (2012), physician Backhouse (2018), and dance researcher Jennifer Deckert (2018).

The dancers in the ENB, BB, and DW classes shifted their focus of attention and breathing management following use of sensorial stimuli by different teachers (verbal instructions, demonstrations, touch and imagery). Moreover, the dancers in my study perceived touch as a helpful action to make them aware of their breathing. Some of the ENB, DW, and BB teachers used verbal cues and demonstrations to guide the dancers' focus of attention to their internal state of breathing. Alternatively, one ENB teacher used the tactile approach to induce the dancers' breathing by focusing on their external state of breathing. In contrast, one BB teacher used mental imagery, taking a reflective stimulation approach. By describing different examples from three institutions, I do not infer that each dancer learnt in the same way. The ballet dancers focused on internal and/or external body states and/or mental imagery to breath.

In an attempt to understand the transmission of ballet technique to young dancers in a

commercial dance studio, Berg found that dancers' breathing was associated with the movements of their arms, in a kinaesthetic dialogue. In Berg's (2016:113) study, the teacher communicated the flowing quality of the movement to the dancers with the use of the breath 'by using his arms and upper body and very little verbal cueing other than exaggerated breath'. Using physical gestures to teach breathing patterns, this communication helped the dancers to understand through multiple senses (visually, aural, breathing) the options of how to breathe. Most ballet dancers in my research preferred suggestions on their breathing by teachers who focused on instructive physical guidance (with demonstration, intensive practice, tactile correction, explanation, and imagination stimulation). They also favoured reflective emotional dimensions, (such as experience recommendation, reflective stimulation, and musical sensation), following Choi and Kim's (2014) classification of ballet teaching.

Based on my findings, the way the teachers deliver the class impacts the dancers' breathing. When teachers spoke calmly to instruct dancers on how to breathe during specific movements, dancers looked less tense, more confident, and coordinated in a safe space of experimentation (Light, interview, 10.04.2018; BB Class 5; DW diary, 23.12.2017). These dancers felt a sense of agency over their bodies in class, through discovering ways of breathing and moving that respected their bodily states. For instance, Rose Alice Larkings (interview 20.05.2018) explained how dancers become agents when they are given space to 'just be through the breathing'. Then, the whole room 'calms down' and they 'are not trying to deliver the movement so hard' (Larkings, interview 20.05.2018). Similarly, Light was able 'to move always with the breath' when at BB the teacher Charlotte Broom (interview, 10.04.2018) stimulated the dancers by 'speaking' calmly and with a low voice. I observed that in this setting, dancers engaged with their breathing with the movement, and as a result, they looked expansive, lighter and continuous (BB Class 5).

The classes I observed at ENB, BB, and DW and the dancers' interviews demonstrate that the dancers varied focus of attention on internal and external body states and use of mental imagery to breathe improves their movement and learning in ballet class (ENB Class 5; BB

Class 5; DW diary, 23.12.2017). The professional dancers' modes of attending to and with their bodies, for instance, their focus of attention, is useful to refine their technique in class. The dancer perceives the environment of the class by focusing attention on one sense more than others and consequently, in this process, the dancer composes her/his sensorium. The dancer can focus attention on external stimuli, such as observing the teacher's demonstration of breathing, which is considered a fundamental part of the dance process. Yet, in dance class, there is an effort to concentrate on ones' own internal senses and sensations, such as breathing, and on the perception of external stimuli. The dancers act interchangeably between awareness of their present body and habits.

My findings did not corroborate sports scientist Gabriele Wulf's (2012:77) study, whereby there is an enhancement of motor performance and learning advantages in skilled performance when teachers instruct dancers to develop an external focus of the movement. My study also did not confirm Guss-West's (2018) study, which considers the teacher's guidance effective when dancers focus on the effect of the movement, for instance through an external conscious systematic coordinated breathing. In my study, dancers enjoyed positive effects on their movement based on their interoceptive and exteroceptive perceptions. Nevertheless, my findings align with Wulf's (2012:78) statement that 'sometimes even a single instructional cue can impact the whole body'.

In some classes, dancers used their breath associated with their movement and/or rhythm (heart rate/music) engaging in modes of self-discovery (ENB Class 5; BB Class 4; BB Class; 5 DW diary, 15.12.2017). On these occasions, most of the dancers' use of their breath occurred interwoven with other senses, such as kinaesthesia and aural.

Some dancers preferred the teachers who promoted the use of their breathing with movement and artistry and enhanced their well-being (emotional state) creating effective learning (Freeman-Sergeant, interview, 13.04.2018; Light, interview, 10.04.2018; Larkings, interview, 20.05.2018; Alves, interview, 12.04.2018). These findings are similar to Choi and Kim's (2014:155) statement whereby the 'ideal' ballet teacher is the one who delivers

teaching methods whilst considering the educational content of ballet to the dancer as a 'whole', considering: 'both the explicit (i.e., technical/body) and implicit (i.e., artistry/mind)'. Yet, Choi and Kim's (2014) study does not focus on the dancer's senses and learning. Through another perspective, my findings show the effect of other senses on the dancers' breathing, such as when the teacher speaks in a lower or louder voice, impacting their ways of breathing (flowing breath or holding breath), and on their feelings (relaxed or tense) through multisensory learning forming their sensorium.

5.3 The dancers' ways of breathing in class

In my study, most ballet dancers learn to manage their breathing to enhance movement execution based on their individual experiences. The ENB, BB, and DW dancers received information about their internal bodily states through awareness of their breathing. For example, some BB dancers reported feeling out of breath after holding it for longer than usual during the execution of energetic and fast movements, such as *frappés* at the barre, or *petit allegro* in centre exercises (Coracy, interview, 13.04.2018; Robinson, interview, 16.04.2018).

In my observations, when dancers were breathless or fatigued, they sometimes used breathing techniques to help them bring their breathing back to normal or by immediately adopting a rest position, for example, leaning on their knees after the jump combinations (DW diary, 25.04.2017). This resting position left space for breathing in effectively through the rib cage and helped lower their heart rate. This is in line with Eccleston's (2016) findings that athletes who became aware of their breathing patterns use techniques to restore their breathing levels.

An important consideration in my thesis is understanding breathing as a sense, which is in discord with the traditionally acknowledged five senses. However, in my study, I consider breathing as a sense because through their breathing patterns, dancers perceive internal information about their bodies. Dancers developed ways to control or benefit from their

breathing in the ballet class in order to use their energy and move dynamically. My findings indicate that dancers weave sensorial experiences of breathing, sensing proprioceptively, seeing, hearing, and touching in class, in a multisensorial learning.

In my participation in ballet classes, I experienced awareness of bodily internal states, such as my heart rate speeding up and sometimes feeling out of breath, after the jumps exercise *petit allegro* (DW diary, 25.05.2016; DW diary, 18.05.2017). In these cases, I took deep breaths in an attempt to control my breathing patterns. In interviews, some dancers noticed feeling excessive tension in their bodies when they were out of breath or holding their breath for too long (Light, interview, 10.04.2018; Robinson, interview, 16.04.2018; Freeman-Sergeant, interview, 13.04.2018).

There is a potential correlation between the dancers' ways of breathing developed in class and on-stage/in the performance. Dancer, Rose Alice Larkings (interview, 20.05.2018) described that after holding her breath, her legs felt tired with 'no oxygen' going to her 'muscles' for a longer period than usual in a performance, and she acknowledged the need to practice conscious breathing in class. Another ballet dancer, Cira Robinson (interview, 16.04.2018) reported being 'an awful breather' in the ballet class because often she was 'holding the breath in'. However, when the classical ballet company repertoire included contemporary choreographies, Robinson (interview, 16.04.2018) discovered some types of breathing coordinated with the movements, such as 'breathing out' on 'down movements'. From these experiences, the dancers started thinking about and applying modes of breathing as a tool to help them on the execution of movements in class. My findings align with Anderson's (2016) premise that, when dancers hold their breath in, they inhibit movement dynamics and impede their awareness, affecting their overall learning experiences.

Rodrigues et al. (2016), found out that female and male ballet dancers can maintain their coordination of breathing patterns when an effort is required and that the dance practice optimises their breathing movement patterns improving their respiratory performance. Yet, a study by Rodrigues-Krause et al. (2015:93) showed that most traditional ballet classes do not

enable the professional dancers to enhance their cardiorespiratory fitness enough to have the breath and energy to deal with the demands of high peaks of breathing intensity that they need in performances. This happens because the ballet class often is structured as a mixture of short sets of explosive moves and continuous *adagio* movement with the moderate-intensity range, such as *grand battements* and *temps levés*.

Dancers Jose Alves (interview, 12.04.2018), Rose Alice Larkings (interview, 20.05.2018) and Clare Freeman-Sergeant (interview, 13.04.2018) explained they often controlled their breathing when doing arm movements. Similarly, dancer Gibbs explained breathing in when 'doing a big *port de bras*', as a tool to 'get more lift' and elongate her spine (interview, 30.05.2018). Based on my findings in section 5.1., the ENB, BB, and DW dancers were not often taught how to use their breath in ballet technique, yet the way they breathed made a consistent impact on their movement quality. For example, Gibbs discussed performing a successful turn after applying the teacher's suggestion 'to breathe out during a *pirouette pique en dehors passé*' (interview, 30.05.2018). In one of my observations of the ENB classes, some dancers' breathing management particularly helped them to execute slow movements, which required strength, such as *fondu*s at the barre, or *adage* in centre exercises (ENB Class 4).

In my study, from the dancer's perspective, there are two different types of breathing in ballet class. These types of breathing are important to note because they play a role in the dancers' movement execution, relaxation and give rise to emotions which are connected to expressivity of dancers' movement. The first is 'movement breath', when dancers' control their breathing, to breathe in and out, coordinated with a particular movements' execution (Freeman-Sergeant, interview, 13.04.2018). Freeman-Sergeant exemplified 'movement breath' when dancers 'breathe in' before going down in a *plié*, before a *cambré* forward, to expand a *port de bras* (arm movements), or 'in a *grand allegro*'. On the contrary, Freeman-Sergeant added that some dancers 'breathe out' to push down on the floor to go up from a *plié* or to come back from a *cambré* forward. For most dancers in the three investigated venues,

and in the relevant reviewed literature (Karsavina, 1962; De Valois, 1977; Romita and Romita, 2016), coordinated timing of breathing with particular movements enables their expressiveness to be enhanced.

This deliberate control of breathing by dancers in ballet class helped to accelerate or to slow down movements. In order to gain impetus, some dancers explained the importance of using their breath to start or end *pirouettes* or jumps (Larkings, interview, 20.05.2018; Light, interview, 10.04.2018). These findings align with Karsavina's (1962:70) premise by which the ballet dancers' breathing awareness and adequate breathing in class help them to execute and express movements.

Some dancers learnt to regulate breathing with the movement, as well with the music. Rose Alice Larkings (interview, 20.05.2018) was aware of coordinating her breath with the melody and the tempo of the music. While participating in ballet classes in London, I also often coordinated 'breathing' patterns with the movement and 'the tempo or rhythm of the music' (DW diary, 27.04.2016). From hearing the first notes of the music, dancers can feel the pace of the tempo of the combination and aim to synchronise their breathing with the music and the movement (DW diary, 20.05.2016). Christina Gibbs (interview, 30.05.2018) explained that if the pianist played at a slow pace often dancer often took longer breaths, but if they played at a faster tempo the dancer would shorten their breath.

Based on my findings, the second type of breathing awareness in ballet class relates to an actual physical breath. Dancer Clare Freeman-Sergeant (interview, 13.04.2018) described physical breath as the expansion and contraction of the lungs through the movement of air in the body, without being controlled by the dancer. The dancers were aware of their breathing through their feeling of expansion, suspension or release of the air inside the ribcage/chest. These two types of breathing (breath associated with movement and physical breath) provided different qualities to the movement execution influencing the dancers' strength and dynamics. Warren (1996) points out a distinction between the physical breath, which is the general breathing without consciousness and control, and the types of breath that

support technical performance.

In a deeper analysis of the internal state of breathing, the interviews with the dancers, and my experience as a dancer, show that dancers' physical/natural breathing involves the creation of a rhythm, connected to the speed of their heart rate and the music played in class, to execute the movement. This aligns with Besobrasova's (1996, cited in Warren, 1996:34) claims that even 'in silence there is a rhythm produced by the body of the dancer, by his heartbeat' and this rhythm corresponds to a beat without music. Even when the dancers dance 'without any music [their] own breath is already rhythmic' (Besobrasova,1996, cited in Warren, 1996:34). I agree with this statement because the art of dancing is in the shape created by rhythm, originated through the association between the vibration to which the dancer feels the music, and the vibration of their own body, creating a melody.

Although some dancers use breathing consciously, other 'dancers take it for granted the need to breathe' carefully in class (Larkings, interview, 20.05.2018). As a dancer, Christina Gibbs reported a lack of awareness in breathing during most exercises at the barre (interview, 30.05.2018). Yet, Gibbs recalled focusing attention on breathing to help a vigorous leg lift in the *grand battement.* Gibbs discovered individual ways of breathing to help her movement execution, which became habitual during her practice of ballet technique. This was called as a 'natural way of breathing' (Gibbs, interview, 30.05.2018). After many years in the profession, some dancers discover personal ways of breathing in order to add strength to complete demanding movements and steps.

5.4 Breathing and effortlessness

One of the aesthetic requirements of the classical ballet technique is that dancers move without making noise, including audible inhaling/exhaling (breathing). Nevertheless, I noticed and heard during observations of classes dancers 'deeply breathing out' through their slightly open mouths. For instance, dancers breath out as a means of releasing tension at the

end of demanding exercises, such as slow and sustained movements from an *adage* (ENB Class 7; BB Class 6). Professional dancers Light (interview, 10.04.2018) and Cira Robinson (interview, 16.04.2018) explained that the ballet class is a place of 'hard work' which demands complex shifts of attention between different parts of the body, to maintain the turnout and balance. This 'hard work' makes them feel 'stiff', thus 'forgetting' to manage their breath to help them move. To overcome the feeling of 'stiffness' and 'not knowing how to breathe with the movement in ballet', these dancers joined yoga classes to learn alternative ways of breathing and relaxation to modify their bodily tension (Light, interview, 10.04.2018; Robinson, interview, 16.04.2018).

Many dancers used their breathing to bring expressivity to their movements (Alves, interview, 12.04.2018; Johnson, interview, 06.04.2017; Light, interview, 10.05.2018; Robinson, interview, 16.04.2018). The expansion of the lungs, the contractions of the chest 'coming from the back' muscles during the act of breathing helped dancers to move (Larkings, interview, 20.05.2018). Sometimes the dancers' manipulation of airflow from breathing patterns can make movements display different qualities and expressions, such as looking expansive or contracted. I observed the visual traits of breathing by paying close attention to the dancer's body. Dancer Robinson (interview, 16.04.2018) explained that when she observed other dancers, if they were 'not breathing' with the movement, often their 'shoulders' lifted, they looked 'nervous', leading the audience not to 'trust their movements'. On the contrary, when the dancers breathed deeply, they expanded their 'chest', which also had the effect of softening their expression for the viewer.

In my class observations, on several occasions I noted the dancers' lungs expanding, their chest and rib cage contracting, and I concurrently heard them breathing. This visuality and sounds of their breathing particularly occurred during jump exercises or specific movements, such as breathing in while expanding a *port de bras,* and breathing out when coming back from a *cambré* backward (BB Class 6). For Robinson (interview, 16.04.2018), breathing management in class and on-stage (in performance) were connected.

In a public talk following one of the performances I attended, ballet dancer Alessandra Ferri explained that she was not used to the intimacy of a small stage where the audience is close to the dancers (ROH post-performance talk, 20.01.2019). For this reason, she deliberately decided to let the audience hear her breathing. In this way, Ferri revealed herself as a dancer that is 'not perfect' and she feels that it is human for dancers to reveal their flaws to the audience. In Ferri's own words 'technique is when the steps disappear and the dance is breath', meaning that dancers should transmit the connection of breath and movement, using the breath to continuously link a sequence of steps (ROH, post-performance talk, 20.01.2019). In such example, the dancer used her sight to move in time and space and the sound of breathing to express movements whilst listening to the music, constituting a multisensory learning.

Each dancer has their personal ways of coordinating moving, interpretation of music and their way of breathing. As a result, two dancers may dance differently to the same movements and accentuate the music differently through the use of breath. Sometimes the dancers choose to use these sensorial elements granting them a personal imprint on the way they dance and apply artistry. However, ballet dancers learn from their teachers and peers that movements should occur without 'any audible breathing' (Bentley, 1982:17). These norms that apply to ballet dancers in class are similar to those ones expected in the ballet performance. It is not traditionally acceptable to hear loud breath sounds from dancers while they are moving, during ballet classes or performances. Teachers in ballet class train dancers to minimise sounds from their bodies in ballet technique because the audience in ballet performances do not expect to 'hear the sound of the dancers' footsteps and breathing' (Bull, 1997:274). Bentley (1982) and Bull (1997) associate the norms of dancers moving without making audible sounds of breathing in ballet technique with as a representation of perfection. According to the technique she had learnt, Ferri's report confirmed that if her breathing is audible to the audience, it is considered a flaw. Nevertheless, Ferri let the audience hear her breathing and dancing as a vulnerable human distancing herself from the representation of a

'perfect' dancer (ROH post-performance talk, 20.01.2019).

According to my observations and participation in classes, dancers also use deliberate breathing patterns to deal with fatigue or pain sensations from intense exercises. After one of the ballet classes, I remember feeling 'a lighter sensation on my body' from deliberately 'breathing in and out to stretch' and releasing the pain in my legs and spine (DW diary, 20.05.2016). Certain types of breathing influence the dancers' emotional states in class. When dancers used their breathing expansively, an emotional state of calm was expressed in their bodies, such as *port de bras* 'arm' related movements (Larkings, interview, 20.05.2018). While taking part in the BB and DW classes, as a dancer, I engaged with my breathing as a strategy to relax and have 'confidence' in movement execution (BB Class 2; DW diary, 12.08.2019).

During my participation in a class, I focused attention to maintain steady breathing whilst pressing the floor with more resistance in the *plié developpé en avant or à la second* to reduce the increased speed during the (thirty-two) *fouettés pirouette passé* exercise (DW diary, 27.04.2016). In this class, Roberta Marquez explained about the use of breathing and touched a dancer's shoulder to demonstrate the force needed for the turn and recommended keeping up the movement with the rhythm of the music. I observed three dancers in this class who were successful in the completion of this exercise and who expressed a sensation of relief and pleasure at the end of the exercise. These dancers engaged in a type of breathing-kinaesthetic-tactile-aural-emotional interconnected sensation to learn.

Some dancers perceived their peers' breathing in class associated with different qualities of 'shallow, tense, and calm' (Larkings, interview, 20.05.2018), or associated with the musical phrases (Coracy, interview, 13.04.2018). Coracy reported observing her peers or going to performances to see dancers to find inspiration to apply different types of breathing in class (interview, 13.04.2018). The data collected reveal that the dancers' breathing associated with movements (e.g., expansive) and with music, express their emotional qualities (e.g., calmness). This partly aligns with Sheets-Johnstone's (1999a) premise that emotions

originate from movement and are motivators of movement.

The interviews, observations, and my participation show that the dancers' ways of breathing were felt by the dancers internally, in their bodies. Breathing can be heard by their teachers and peers and can be visually observed mostly through the movement of the dancers' rib cages. The myriad of ways dancers used their breathing was learnt and practised in class, becoming a resourceful way to help them in rehearsal and performance. Dancers partly learnt breathing control based on their teachers' instructions, as indicated in some ballet manuals, as a useful tool to help them before, during and after movement execution (Karsavina, 1962; De Valois, 1977; Anderson, 2016; Romita and Romita, 2016). Apart from these ballet manuals, my findings align with studies from a variety of disciplines. To explain the myriad of ways dancers use their breath, I was inspired by research which considers breathing as a way of understanding about internal bodily signals, and states, and emotions, in neuroscience (Damasio, 1999) and psychology (Eccleston, 2016; Christensen, Gaigg and Calvo-Merino, 2017). Damasio's (1999) study included a greater function of breathing and the orientation of the body toward the world.

In my study, dancers described multiple ways of breathing in class associated with movement and rhythm. Some dancers explained how the music helped them to breathe and relax. Cira Robinson felt as 'an artist, a dancer' transported to another bodily state 'somewhere else' when she heard the music and used her breath to move (Robinson, interview, 16.04.2018). In addition, for Fernanda Oliveira (interview, 14.03.2017), to 'breathe with the music' expanded her movement in class. The dancers' breathing management was associated with the expansion or contraction of their bodies' movements and their emotions in class.

In the dancers' accounts, breathing was one of the sensorial modalities they experienced as constitutive of their physicality. Dancers at the professional level continued to learn about their moving body in daily class through the fundamental sensory modality of breathing. My findings demonstrate that the dancers' physical or natural breath was alternated

with deliberate ways of breathing. For instance, breathing with music/rhythm of music, breathing with the rhythm of movement, breathing as a relaxing mode, or breathing in such a way to transport them to a state of flow 'somewhere else'. In the class environment, it was essential to consider the role of the dancers' breathing techniques because it intertwined with their multisensorial learning.

This chapter has shown that dancers used their breathing not only for basic physiological survival but for a myriad of purposes. For instance, some dancers focused to connect breathing with rhythm, in particular with music phrasing, or with certain movements to increase its strength or dynamic. Others felt emotional sensations linked with their use of breathing in class. As explained in the previous sections, there is an absence of consensus in the data gathered from the ENB, BB, and DW classes and in the ballet literature about how ballet dancers use their breathing in class.

As mentioned in the introduction of this thesis, for Volinsky (2008) and Grau (2011) ballet technique is often perceived by its verticality, a straight line directed upward. This verticality becomes an embodied posture in ballet technique affecting the way dancers breathe. The dancers in my research pursued the aesthetic requirement of vertical posture by elongating their spines and pulling their stomachs in, whilst often holding their breath. Similarly, Romita and Romita (2016) found that when dancers overexerted the teacher's instructions to 'pull up' or 'pull in' the abdominal muscles, they became stiff and tense, impeding fluidity of action and range of motion. A group of ballet dancers reported a lack of awareness of their respiratory state in class until they felt shortness of breath, or their heart rate speeded up indicating the achievement of a physical limit and their need to control it (Coracy, interview, 13.04.2018; Robinson, interview, 16.04.2018; Larkings, interview, 20.05.2018). The ENB, BB, and DW ballet dancers experienced internal (e.g., breathing, heart rate) and external states of the body (hearing the music) linked to emotions (e.g., calmness). These dancers put their personal imprint on the movement in class based on their breathing, other sensorial states and emotions. These findings support Sheets-Johnstone's (1999a)

premise that emotions are motivators of movement and Damasio's (1999) idea that emotions are interwoven with breathing. Moreover, these results partly align with studies by Christensen, Gaigg and Calvo-Merino (2017) and Christensen (2016) regarding dancers' awareness of sensorial states and emotions.

Sections 5.1 and 5.2, discussed how professional dancers in ballet class experienced their breathing, as a sensorial modality constitutive of their sensorium. This exploration broadens the understanding of dancers' breathing as one of the multiple senses that affects their movement in class. By recognising the ways in which the ballet dancers breathe in class, it is possible to investigate and experiment modes of breathing, promoting the wellbeing of the dancers and reducing their risk of injury. This statement aligns with Haughey's (2013) premise that the dancer's sensory awareness can be a powerful agent to change their abilities and habits. As a result, dancers can discover different ways of breathing which can enhance their technique and alter their emotional and physical states.

5.4 Summary of Chapter 5

The dancers' breathing was physiologically and psychologically recognised by the participants. Based on my findings, I suggest that their respiration was modified by their own discoveries through movement, emotions and other internal states of the body (e.g., stiffness, fatigue, flow, calmness). The dancers' ways of breathing were influenced by their teacher's verbal and tactile correction cues, as well as observation of other dancers' movements, or a combination of all the above elements.

The findings of this chapter show how Santos' (2018) concept of *corazonar*, which considered the values of a particular sociocultural system are interconnected with one's senses and emotions. Breathing is associated with the dancer's perception of the internal rhythm of the heartbeat and it can be seen and heard. For these reasons, I argue that breathing is a part of the dancer's sensorium and can be understood as a sense when considering the setting of

the ballet class and the culture it promotes.

In the analysis of free diving experts, Eccleston (2016) considers breath as a physical sense. Eccleston found out that free diving experts draw their attention to breath and often used breathing techniques related to a 'spiritual experience of engagement and flow' (2016:85). In my investigation the ballet dancers experience their breathing in class, as a physiological and emotional element, expressed through movement execution and rhythm. For example, when dancers used their breathing with the rhythm of the music and with their movements, they felt calm and confident. Additionally, the dancers' breathing patterns had a technical impact on their movement, such as when they deliberately breathed to add more impetus and dynamics to elongate their spine and lift their bodies. For some dancers, their performances served to discover other strategic ways of breathing which can be useful to apply in the ballet class (Robinson, interview, 16.04.2018; Larkings, interview, 20.05.2018). Other dancers reported enhancing their breathing in class based on learning from other bodily techniques, such as contemporary dance (Larkings, interview, 20.05.2018) or yoga (Light, interview, 10.04.2018).

From a psychological perspective, breathing is recognisable as a specific sensation and discussed as a phenomenon. Although breathing is experienced mostly out of awareness, for Eccleston (2016:55) it is 'the most functionally pure of the physical senses'. Breathing involves 'innervated muscle and connective tissue providing specific position, capacity, force feedback and receptors identifying the pressure of respiratory gases' (Eccleston, 2016:2). The experience of ventilation as breathing is alike to movement and balance due to its biochemical and physiological properties.

As described in section 1.1, the Western cultural dominant model of the five prime senses (sight, sound, smell, taste and touch) proposed by Aristotle (2002 [1968]) is associated with the sense organs (eye, ear, nose, mouth, hand/skin). Howes (2013a, 2013b) explains that following this model, kinaesthesia and breathing are not considered senses. Although innovative in its time, Aristotle's model of the senses was based on our organs and did not

consider human differences in the use and perception of the senses from various cultural groups. From another perspective, genealogist Bruce Durie (2005) suggests that the senses can be classified by the nature of the stimulus. Durie's (2005) sensory model classifies three main senses concerning states of the body, such as chemical (sensed as taste, smell or internally, as with blood glucose), mechanical (touch and hearing) and light (vision). This model also includes animals that have electroreception or a magnetic sense. However, these approaches focus mainly on physical or physiological aspects to classify the senses.

In contrast to the above perspectives, Classen and Howes (2014) claimed that the senses can be studied as a way people perceive their surroundings, considering the way individuals perceive, make use of or interpret their senses. For example, as discussed in section 1.1, Geurts (2002) defends the recognition of broader sensorial expressions of a group's the culture in her ethnographic investigation of the African Anlo, including heat, kinaesthetic impressions, balance, and affects (such as tickling, itching, or pain) in the constitution of their sensorium. Eccleston's (2016) investigation of sensorial experiences through twenty-one personal narratives suggests the inclusion of other ways of sensing such as balance, movement, pressure (acting in gravity), breathing, fatigue, pain, itching, temperature, appetite, and expulsion. In dance studies, previous investigations of professional contemporary dancers' perception of their sensorial experiences have included breathing, kinaesthesia (Roses-Thema, 2007) and heat (Potter, 2007). These studies broadened the understanding of the elements that form the dancers' sensorium and serve as an inspiration to support my argument to consider the ballet dancer's breathing in class as a sense.

The perception of breathwork in the professional ballet dancers' accounts is crucial to understand how breathing feels, as part of their multisensorial learning. In the case of the professional ballet dancers, breathing is a perceived sense and accompanies sensations of movement (e.g., breathing expands the internal elasticity of the movement), rhythm (e.g., breathing during phrases of music to coordinate movement), and an emotional dimension (e.g., breathing management connected to feeling calm and confident to move). Therefore, I

consider the way professional dancers use and perceive breathing patterns in their specific environment of the ballet class associated with movement, rhythm and emotions, broadening the perspective of their senses alongside their physiological and physical states.

The dancers' practice of breathing brought a sense of connectedness to their bodies. The music in the class created a rhythm which enabled dancers to coordinate their breathing and movements. According to dancers Robinson (interview, 16.04.2018) and Larkings (interview, 20.05.2018), this rhythm allowed them to breathe feeling an emotional state of wellbeing while dancing in class. These findings indicate that the dancers engage with their breathing (internal state of the body), coordinated with movement and rhythm of the music in class, sometimes gave rise to emotional feelings which promoted an altered state of the body. My interviews reveal that dancers used their breathing associated with a sense of freedom to imprint personal ways of moving. Dancers achieve such artistic freedom by attending to their breathing as an internal rhythm and experience of a replicable, or steady timing. Some dancers used words such as 'feeling empowered' when they had the freedom to explore and experiment with breathing in class. My findings indicate that when dancers focus attention on the sensory stimuli of breathing, it altered their ways of moving.

Chapter 6 – Decolonising the professional ballet dancer's multisensorial learning: interconnected ways of sensing, feeling and thinking in class

In this chapter I discuss how broader and multiple ways of using the dancers' senses in the process of learning may help to democratise the ballet class. In the previous chapters, the case studies on particular senses aimed to demonstrate how dancers sense, feel, think, whilst moving at the same time. These elements are interwoven with ways through which dancers orient themselves in the world. Furthermore, my analysis of the dancers' multisensorial learning revealed particular ways in which sensorial perception may also influence emotions and reasoning. I consider the dancers' senses and sensations as a means of making meaning of the world, whilst embodying the dance technique, in dancers' encounters in the social space of the class. By including the dancers' emotions associated with their senses and behaviour in class, my study endeavoured to consider dancers as holistic individuals.

I argue that professional ballet dancers sense in class through their emotions, affects, and reasons as ways of knowing, similar to Santos' (2018:100-101) idea of '*sentipensar*' (feeling-thinking). This term defined in the introduction of this thesis was previously developed by Borda (2015:10) in his investigation of farmers and fisherman in Colombia. As I discuss below, these notions that are associated with deep sensing have several consequences on the dancers' emotions and behaviour, impacting their focus of attention and decision-making in class. In this chapter, I will explore how dancers' deep sensing and flexibility of their sensorium is associated with their learning.

Throughout this chapter I discuss two set of questions related to professional dancers learning: one on the benefits of combining senses and another on the increasing the awareness of said senses. There is a difference between perception as the gathering of information through the senses, or inputs and outputs of data, and the embodiment of a particular set of code or guidelines, such as ballet technique, which generates experience and know-how but also transform the bodies having those experiences. That is, the kind of knowledge acquired

via observing a set of steps or reading them in a book is distinct from the kind acquired via performing them.

The professional ballet classes in three London institutions bring together dancers from various parts of the world with different cultural experiences. As I have demonstrated across the case studies in Chapters 3, 4, and 5, these classes still all too often promote a hierarchical system of the senses. For instance, most teachers prioritise vision (section 4.1), a few dancers touch their own bodies for kinaesthetic awareness (section 3.2), and most dancers focus on breathing only when reminded by their teachers (section 5.2) In practice, some sensorial modalities in my study, such as dancers' touch, visuality, breathing, kinaesthesia, aural, and balance, intersect when they are learning in class. These and other sensorial modalities form each dancer's shifting and flexible sensorium.

Each dancer can deploy a different combination of senses depending on the class. The employment of their senses can vary depending on the company setting as opposed to a commercial studio, different teachers, or the amount of space in the class. I found that the combination of the dancers' senses occurs differently in the diverse institutions and the socio-cultural environments of the ballet class. These combined senses serve as means to apprehend the physical phenomena and transmit cultural values according to each class environment.

My investigation of the social and cultural influences on the dancers' senses in class, goes beyond the notions of sensorium of Howes and Classen (2014) and Geurts (2002) and of *corazonar* developed by Santos (2018). My study demonstrates how theorical concepts, such as deep sensing, from the epistemologies of the South can help to democratise the ballet class. These concepts involve considering the dancers' affections and emotions, knowledges and reasons, as beings who sense, think and feel. These ways of sensing are interconnected with the dancers' learning. Broaden understanding of the dancers' ways of learning through different senses can help to democratise the ballet class. For instance, dancers in my study pointed out diverse ways of sensing. In respect to their genre, dancers felt different emotional states which influenced their breathing and kinaesthetic sensations within mixed and gendered

classes. Many dancers from across the three case studies compared the images they saw of themselves in the mirror to the idealised ballet bodies learned in these classes, which did not fit the idea of inclusive body types. In this process of refining their technique, dancers engaged with their senses, thinking and feeling, which also impacted their application of artistry in class.

The consideration of the participants' senses from multiple perspectives brought to the surface new information and more aspects than would be understood through the review of manuals, or existing literature about ballet classes. Apart from specific characteristics of each institutional ballet culture, dancers also bring with them individual experiences from their background. All these together impact the way they sense, feel and reason in a ballet class. This was seen through shifts in the interconnections of the dancers' senses and ways in which they perceived, apprehended, transformed, and deployed these shifts as part of their embodied learning toolkit.

For example, in Chapter 3 I discussed and exemplified how touch interfaces with the dancers' kinaesthetic memory and emotional states; and sometimes it also connected to their visuality (interviews with Alves, 12.04.2018; Robinson, 16.04.2018; Gibbs, 30.05.2018). Following that analysis, I was able to identify three main types of touch in the ballet classes: the dancers' feeling of their teachers' touch; the dancers' feeling of their own touch; and also, the dancers' use of objects which promoted a haptic sensation. Social interactions through touch also revealed a social dimension: in some companies, more than others, the transmission of knowledge amplified facility of peer-to-peer learning. This is to say that some dancers also experimented novel ways of sensing, for instance, some dancers followed each other's strategies of using props (resistance bands, balls, extra weights on the legs) to stimulate their haptic sensations.

A related finding from Chapter 4, on visuality, was that dancers engage with their teachers and peers through gaze in a multitude of ways, whether through instruction or to develop more nuanced social exchange. Deploying a deep sensing perspective, helped me to

observe how visuality also was as a social construction which exposes the senses as a function of power relations. In section 4.2.1, I demonstrated how the use of visual sense influenced dancers' sense of freedom, or exposed the aggressive, hegemonic internalised 'ideal' body image—normative and White. Through the analysis of relationships that occur visually in these classes, it was possible to observe how dancers themselves develop the acts of self-surveillance to discipline their bodies and to promote internalised self-critique. Moreover, the dancers' use of imagery and internal seeing, was internalised in their memories, which often were racialised and gendered body images. The dancers' deep sensing means that their senses interconnect with reasons and feelings and this process is flexible and changeable. Given that dancers' deep sensing is at work in the ballet class, my study revealed that there is a potential to use the sensorium to unlearn such habits. This fluid deep sensing, thus, may facilitate the dancers' agency and help to democratise the ballet class.

In Chapter 5, I argued for a broadening of the conceptualisation of the dancer's sensorium by including breathing as a sensorial modality. Although recognised as important by some teachers in oral transmission (such as Karsavina, discussed in section 1.3.4), breathing techniques are often neglected as a method of learning in the ballet class. Dancers in my study rather spoke about breathing as a useful but under-discussed sense which contributes to the movement execution and a sense of rhythm, and accentuation, but that it also contributes to the amplified feelings and their regulation (e.g., sense of confidence, and adversely, distress). The dancers in my study (interviews with Alves, 12.04.2018; Johnson, 06.04.2017; Light, 10.05.2018; Robinson, 16.04.2018) often associated the use of breath as a way to unlock emotional states, for example to help them relax, and/or as a means to achieve expressivity and expand artistry. Then, if breathing is understood as part of deep sensing, which integrates feelings into sensorium, I can see the potentials of it as a sensorial modality that can help open a more comfortable learning environment for different personal circumstances.

Although they are not the only important senses, the three sensorial modalities studied in this thesis, are illustrative examples of ways in which balletic norms may be disseminated

and embodied by the dancers with greater sensitivity to their differences and learning needs. Furthermore, as ballet classes in London form extended social networks, these strategies can be easily shared across institutions. Some ENB and BB dancers in my study attended classes at DW, and showed how sharing and transferring values and beliefs to the members of these institutions in the London ballet scene is happening effectively. In addition, some dancers also taught in different institutions and some of their teachers worked at one or more of these institutions. Despite this, the dancers carry different sensoria which shift with new circumstances. This is important because, through the sharing of more inclusive approaches to ballet class, dancers can change their ways of sensing and learning. In addition, through new behaviour dancers can shift the value systems of their class as a more inclusive and democratic form. In this respect my study relates to, but also extends the findings from the study by Alterowitz (2014). My findings contribute by revealing positive potentials of the sensorial learning, because the dancers, as deep sensors, move through different classes/institutions and may both modify their own habits, as well as transpose new stimulations in different ballet environments.

6.1 Benefits of deep sensing: *corazonar* and *sentipensar*

The notions of *corazonar* and *sentipensar* may contribute to the development of dancers' artistry and sensing whilst utilising their emotions in the class. Developing a transcultural approach to the ballet class means to consider a sensorial and more individualised perspective which empowers the dancers to observe, and reflect upon their learning in new ways. As explained in the previous section, deep sensorial approaches can help to broaden dancers' sensorial awareness and to decolonise the way they learn in class. Senses thus reveal new epistemological modes, and impact the dancers' ways of knowing in the ballet class. The sensorial shifts (using different combinations of senses to promote different emotions) also may expand deeper awareness of multiple ways of sensing and

knowing according to their individual backgrounds, stimuli of the individual class environments, and different circumstances of the dancers' daily lives. As my interviews and observations showed, the dancers can engage with their senses, such as touch, vision, and breath, to acquire and embody knowledge in social relations and relate with their teachers and peers.

This is how the framework of deeper sensing led me towards a continually deepening analysis. It was clear from my analysis that the dancers' sense of kinaesthesia (meaning the sense of movement) was associated with touch, visuality, and breathing in the classes at ENB, BB, and DW. My findings reveal that the ballet dancers' breathing operates in harmony with their sense of kinaesthesia, listening to the rhythm of the music and feeling their internal rhythm. Additionally, the dancer's visuality was highly interconnected with kinaesthesia. In my study, the dancers' ways of touching with their hands, feet, and skin sensations are related to their kinaesthetic ways of moving, pain relief, sensing temperature, and awareness of balance.

Dancers also experience other sensorial modalities in class, such as pain, heat, heartbeat, pleasure, and altered states, such as flow. Further thinking about the modes of democratisation in the dancers' learning process was important to understand how dancers acquire sensorial knowledge from different relations in class and how they internalise and retain sensorial memory from their movements. This was important when it came to visuality (internalising racialised and gendered images, for example), or touch (that can be both intrusive and helpful, depending on behaviour and social norms and negotiations). My findings indicate that the professional ballet dancers' senses and sensorial modalities are constantly interconnected in different configurations.

As explained in Chapter 1, I use the term senses and sensorial modalities interchangeably. I consider senses as means of comprehension of the dancers' engagement with the world. This notion extends sensorial perceptions far beyond the Aristotelian model to consider Classen and Howes' (2014) and Geurts' (2002) socio-cultural perspective of the

senses. Sensorial modalities are the ways of sensing which did not fit this traditional classification, such as kinaesthesia and balance. I recognise the dancers' knowledge of technique and artistry in ballet classes as a result of their engagement with their senses and sensorial modalities constituting unique ways of sensing. Dancers learn and discern between multiple layers of meaning in the same sense or sensorial modality. Given these results, it became clear that this shifting opens possibilities which can be addressed an corrected through sensorial learning. For instance, to address the damaging habits and values embedded over time into a ballet class, or a ballet community.

Furthermore, it was clear that the dancers' individual senses always intersected with other sensorial modalities. Crisscrossed interactions of senses also changed in its configuration and promoted different forms of affective relationships, giving rise to certain emotional states. In the classes at BB and DW, dancers described monitoring their bodily states, for instance through coordinated breathing to create a rhythm for the movement within the music phrases (Robinson, interview, 16.04.2018; Larkings interview, 20.05.2018). These dancers felt a sense of agency when breathing because sometimes it triggered an emotional state of wellbeing. Noticing the dancers' awareness of the complex interaction between breathing-kinaesthetic-aural-emotional multisensorial learning was very important.

This is relevant because the dancers can tap into their shifting sensorium to create a more democratic learning. Alterowitz (2014) and Whittier (2018) already discussed recommendations for a creative and collaborative ballet class as a way of creating democratic learning environments. Yet, their discussions did not focus on the role of the senses. My study contributes to those discussions by noticing how democratic learning is connected to Santos' (2018) conceptualisation of deep sensing. In other words, knowing through deep sensing means the 'idea that knowledge is embodied' through senses, a recognition that epistemological processes are corporeal activities (Santos, 2018:15). Considering the findings from my three case studies, below I review some of the ways through which dancers engage with their

shifting sensoria to open way towards learning democratisation-as-decolonisation in the ballet class.

Practically speaking, to democratise the senses in the ballet class means to go beyond treating the ballet knowledge as a closed system, and the dancer as a growing depository of this knowledge. Consequently, it is necessary to include the dancer's individual previous knowledge and experience, also known as the habitus (discussed in section 1.2.2). The process of democratisation of ballet class in my study means keeping at the forefront the social issues of stratification, race, gender, authoritarian (power) relationships. Whilst they strive to create supreme ballet practitioners with great embodied eloquence, many ballet institutions do not notice how they still deploy methods that can greatly impact (sometimes damage) the ways dancers sense and learn.

Based on a broader knowledge situated in the South, Paulo Freire's[63] pedagogical theories defined the principles of a democratic education (as discussed in section 1.2.1). Thus, my study shows the importance of connecting several concepts to challenge the hierarchical structure of the senses in the ballet class. Such concepts are Freire's (1987[1970]) democratisation in education, Alterowitz's (2014) notion of democratisation in the ballet class, and Santos' (2018) notion of *corazonar*, or the fusion of feelings/emotions with knowledges/reasoning. The decolonisation of dancers' senses may disrupt hegemonic ways of learning by changing the dancers' habitual ways of apprehending and transforming information.

As I demonstrate in my case studies, dancers learn in particular ways through their engagement with the environment with their senses. In their social relations in class dancers form ways of learning and knowing about the technique, artistry and how to engage with the environment of the class. As demonstrated in sections 3.2, 4.2 and 5.2, all dancers described being aware of some sensorial modalities (e.g., touch, vision and breathing) related to bodily states (e.g., weight, placement, spatial orientation) when they were executing movements or

[63] Freire's (1987[1970]:63) theory was critical of a 'banking' model of education, in which the students in a class are treated as depositories/objects and all the knowledge comes from the teacher who is the subject in a top-down hierarchical relationship. Many ballet classes in my study still follow this historical model of learning. However, Freire (1987[1970]) disseminated a new model of education in which students and teachers learn.

steps in case they need to modify them. To broaden the means by which dancers perceive and learn, would mean also to extend sensorial awareness, and include multiple and varied ways of sensing. This is similar to the concepts of *corazonar* or *sentipensar*. Based on these concepts, I suggest that dancers can change their habits of learning to include more senses. For instance, this can occur when dancers explore varied ways of breathing, seeing and touching in class.

Considering that the sensorium is a flexible and shifting entity, which can help to change those learning habits I investigated the dancers' senses from several perspectives. This served to understand how dancers perceive some senses more than others, and through multiple ways of sensing. These varied perceptual ways of gathering and processing information from the environment, through the senses may democratise learning in ballet class. For this reason, deep sensing as a concept may serve as a means to promote more varied ways of sensing. This new ways of learning in ballet class may bring positive results.

In my study, the dancers feel and reason about their perception of combined senses in class. These ways of knowing about technique and artistry resulted in different ways of sensing, which promoted sometimes intensified states of the body. As described in section 5.2, a few dancers reported aural and tactile sensations from their engagement with the teacher during the *fouettés pirouette passé* whilst feeling breathing-kinaesthetic-tactile-aural-emotional states intertwined (DW diary, 10.06.2016). In this case, the teacher instructed the dancers to focus attention, bringing awareness to their breathing patterns coordinated with the movement and its musical dynamic. As a dancer participating in this particular class, I felt a heightened awareness of the weight of my body on one foot pressing the floor on multiples *relevés*, listening attentively to the musical tempo and phrase, breathing in to get strength for the turns, using my vision to spot a point in space and experiencing an emotional feeling of enjoyment during the suspension of the turn (DW diary, 10.06.2016). These combination of senses, feelings and reasoning constitute the dancers' knowledge. This finding can be used by other dancers as they recognise the importance of their senses, feelings and reasoning in the composition

of their knowledge. Such recognition can help dancers feel deep sensing whilst refining their technique and applying artistry. In addition, the teachers' acknowledgment of such knowledge and guidance through varied sensorial inputs can promote increased awareness on dancers. This deep sensing can be expanded to other dancers and classes leading to democratic learning in the ballet class.

I define the dancers' sensing-feeling-thinking as a means of perception, apprehension, that has potential for transformation of their learning in class. The dancers' senses are associated with their emotions and reasoning and this creates a form of multisensorial, affectively engaged learning, similar to the epistemological concept of *corazonar* (Santos 2018). The dancers' individual ways of engaging with their senses in ballet class may thus promote difference, and given that their experiences of the world are diverse, such an approach may lead to the decolonisation and democratisation of their learning. This may also broaden and give nuance to the balletic movement quality. To explain this more, in the following sections, I return to my principal research questions, from the thesis introduction and connect them to the key points and main ideas from my empirical findings.

6.2 Impact of the professional dancers' senses on their learning

Today's ballet dancers perform a greater technical and stylistic variety, with higher intensity. They continue to learn every day. The daily classes often take place in discrete contexts (separate companies and studios), yet interconnected, sociocultural environments (London) with a shared (hierarchical) ballet structure. For instance, professional ballet dancers are expected to be versatile and fit to address the high-intensity physicality of the choreographic repertoire of their ballet institutions and the class should prepare them for it.

The results of my research also indicate that deep sensing enables profound connections between various sensorial input/outputs. In the investigated London institutions most classes start at the barre with *pliés* and end in the centre with *grand allegro*. The dancers

follow the teachers' instructions, and they train in groups organised according to the exercise. In terms of dancers' variety of movements associated with kinaesthetic experience, some classes offered elements which exceed a traditional ballet class. For instance, some teachers, such as Anna du Boisson at DW, draw attention to some exercises focused on the dancers' contact with the floor; in turn, these shifted points of contact change the dancers' sense of weight and of gravity. In doing so, her pedagogy enhances tactile-kinaesthetic sensations in specific combinations between the barre and the centre. Similarly, at DW, classes with Raimond Chai, Denzil Bailey, and Rose-Alice Larkings include off-balance steps with dynamic shifts of weight exploring balance-kinaesthetic-aural sensations of movements. As I demonstrated, through such approaches, dancers reported experiences of a more open-minded approach in the class: there was a disruption of hegemonic habits in their ways of sensing and moving in these exercises. Such findings already discussed in section 2.2, draw attention to the ways in which the dancers, through interaction with teachers' approaches, may discover a new, more democratised use of their sensoria.

The professional dancers in ballet class in my study have felt and sensed the movements and steps in the process of incorporating them. Hence, perception becomes not just a passive registration, but an interactive facility. For instance, at the daily ballet classes I investigated, dancers practice and refine new *enchaînements* with different music. Within a single class, different dancers find tacit ways to select and prioritise particular senses and sensorial modalities. Despite not being able to predict how they are going to feel, all dancers can be aware of how they are feeling at the moment of the class by attending to their sensuous perceptual means (Larkings, interview, 20.05.2018; Light, interview, 10.04.2018; Oliveira, interview, 14.03.2017; Freeman-Sergeant, interview, 13.04.2018).

The dancers in my study also monitored their own movements based on the memory of previously retained awareness of sensations and confidence of successful movement performance in the class (emotional states). Chapman (interview, 30.03.2017) explained that is difficult for dancers to realign their bodies through a reflective process of doing a class, to

have awareness of their senses, feelings and of 'being present'[64]. For Chapman, dancers can feel exceptionally present in class or on-stage as a 'condition of their physicality to maintain a high level of activity, level of muscular strength and mental determination'. In my study, I have interpreted this mode of awareness and of 'being present'' as a kind of deep listening, deep seeing, deep touching, deep breathing, in other words deep sensing. That is a broad awareness interconnected to the dancers' senses. It generates calm, alertness, feeling the presence of others, consciously participating, as an active and present-centred use of the dancer's body. The dancers shift the organisation of their sensoria based on how they feel, and intensify, prioritise or ignore some sensorial modalities in their ballet class.

The dancers can promote a deep sense of interconnection between their senses and emotions in class. In my participant-observations of the classes in London, this interconnection was visible when the dancers, as a group, synchronised their movement to the music in group sections in Marquez's class at DW (DW diary, 08.03.2017). My observations indicated that particular teachers[65] guided dancers in their classes to dance as they would during a performance. These stimuli to engage with artistry in class facilitated dancers' sensorial awareness (deep listening) as well as relating to each other (their peers); all this promoted heightened sensing of their bodies (as experience of *corazonar/sentipensar*). For example, half of the dancers explained feeling somewhere else, through the combination of senses while performing movements in class (e.g., in tandem with sensing their breathing, listening to the music and feeling emotions).

In these contexts, dancers engaged in being present in class and brought awareness to their movements from the beginning of the class. Almost all dancers interviewed applied

[64] The term corresponding to the dancer's state of being 'present' is discussed by psychologists Marie-Anne Chidiac and Sally Denham-Vaughan (2007) as presence. For Chidiac and Vaughan 'presence' is defined as 'energetic availability and fluid responsiveness' (2007, p.9). For instance, dancers have an 'embodied aspect of being present' which is manifested through the quality of being grounded, fully alert and yet apparent still' (Chidiac and Vaughan, 2007, p.10).

[65] For instance, teachers such as Denzil Bailey, Anna du Boisson, David Kierce, Roberta Marquez, Sander Bloomaert at DW (DW diary, 09.01.2018; DW diary, 26.04.2019; DW diary, 03.03.2018; DW diary, 27.02.2018) and Damien Johnson and Deirdre Chapman at BB (BB Class 1; BB Class 2) suggested dancers to perform in class as they would in performance.

artistry and movement intent through particular senses which was noticed in detail in their movement quality. Such deep interconnection of the senses and emotions goes beyond Kieft's (2014:30) notion of the dancer as a moving being, considered as 'spirituality', and extends Borda's (2015) and Santos' (2018) notion of emotions and reason as *sentipensar* and *corazonar*. In my study, each ballet dancer embodies and brings intent to approach movement in a personalised way through the use of their sensorial and emotional states.

In the opening of this thesis, I considered Santos' (2018) deep sensing as a premise for a methodology, and I developed it in order to conceptualise dancers' different modes of sensing. Such deep sensing perspective also helped me to focus on the dancers' sensorial modalities as pathways toward reframing their knowledge (both to know about and to know-how). The epistemologies of the South and the notions of deep sensing, *corazonar* and *sentipensar* helped me to see beyond the Western way of thinking, which is traditional to ballet. In doing so, it enabled me to explore a type of democratisation of the dancers' senses in the daily ballet class. According to the epistemologies of the South, there are other ways to understand the senses, as they reveal different knowledge. As explained in the introduction of this thesis, I draw on Santos' (2018:171) premise that, bodies are different and experience senses differently; for this reason, they need to be studied through varied perspectives of 'sensing'. I employed the concept of deep sensing as means to investigate the dancers' ways of knowing which occur through *corazonar*, or the fusion of emotions/affections with knowledge/reasons. It is through this analytical perspective of the dancers' ways of knowing that the senses of touch, visuality and breathing emerged from my data.

Similar to the idea of '*sentipensar'* (feeling-thinking) proposed by Borda (2015:10), the concept of '*corazonar'* also discussed by Santos '(2018:100-101), consider a person who acts combining reason and love. Subsequently the body and the heart in emotions/affects/reasons, and the feeling/thinking, are ways of knowing inscribed in social relations. As Santos (2018:167) explains, a deeper understanding of a particular practice requires the 'confluence of the various senses'. Drawing on the Southern ways of knowing

from Santos and Borda, in my study I developed the notion of multisensorial learning, which considers the dancers' sensing, thinking, and feeling. The idea of democratisation-as-decolonisation through the senses in a ballet class focus on a sensorial opening towards considering the dancer as a whole, through inclusion, experimentation and dialogue. To change some ways dancers sense to learn is crucial to understand different perspectives about their ways of moving.

Currently in London professional ballet classes as a preparation for staged performances demand high levels of energy, quick dynamic, and stylistic changes from dancers. All this affects the performers' sensorial ways of learning. Ballet dancers' modalities of breathing, seeing, and touching are examples of the many sensorial means they learn in class. When analysed through a decolonising perspective, these ways of sensing enable discussion to democratise the class. This means that the combinations of deep sensing and *corazonar* offer great potential for dancers to learn in new ways and to focus on other sensorial ways that can help them feel differently. Even in ballet class whose code privileges precision, the dancers' performance is informed by their individual senses, feelings and ideas. Based on the results of my research, I propose to rethink how the dancers can use their senses in the ballet class with a deep sensing perspective. Furthermore, this perspective considers dancers holistically, as subjects which can engage collaboratively in class with the demands and aesthetics of ballet technique and application of artistry. I observed in my field research that dancers are thinking and emotional artists, whose medium (e.g., their thinking and feeling bodies) benefit from environments that promote fitness and wellbeing. The notions of *corazonar* and *sentipensar* open up means for dancers to work connected with their senses, emotions and reasoning in a democratic and sensuous learning environment in the ballet class.

6.2.1 Democratisation through deep sensing

According to Santos, deep sensing concerns people's experience of the world through their perceptions, emotions, sensations and senses (2018, p.165). Following the epistemologies of the South, these senses are associated with reasoning in a feeling-thinking association, in which *corazonar* enables a personal responsibility and transformation of the perceived world. The lens of social space helped me to explore the ways in which dancers in London engaged in class and experienced processes of inequality and social domination inherent to the practice of contemporary ballet in the UK. For example, with regards to race, dancers of Black and Asian descent felt the lack of touch from the teachers as a means of corrections (Alves, interview, 12.04.2018; Light, interview, 10.04.2018; Robinson, interview, 16.04.2018). The investigation of the dancers' sensorial engagement is important because through deep sensing, feelings and even positive emotions dancers can be aware and overcome some of their ways of learning. For instance, in section 4.2, my findings indicate that the mirror is a useful learning tool when it comes to dancers seeing and correcting themselves for balletic line. However, the mirror also impacts the dancers' self-image, particularly when a dancer associates the image they see of themselves with an 'idealised balletic image' encountered in the broader visual culture (dancers' images in video, film, promotional materials of professional companies). Such ideal images are unattainable for some dancers and create negative feelings, such as low self-esteem. This was particularly notable in BB, which is a diverse company. The ballet images are traditionally racialised-normative and dancers in my study felt that the image they saw of themselves during their formative education often did not correspond to the ideal balletic bodies disseminated in most ballet institutions they attended (as discussed in section 4.2). The mirror, and its role in development of visuality, thus, is experienced a double-edged tool, that dancers in this study use to focus on their self-awareness and confidence, in addition to focusing on their visual aesthetic.

Yet, from a perspective of deep sensing, in ballet class the diversity of gender, race and neurodiversity may be promoted with greater acceptance of different experiences. By shifting the focus from visuality, as one of the principal senses used in the class, toward other

senses, such as proprioception, or listening, and touch, the dancers can focus away from their mental body image in the class. With a greater sensorial engagement, there can be further opportunities for difference and promotion of more democratic engagement with the ballet technique and movement content. For instance, the dancers reported that when they have freedom to adapt movements and steps in the combinations in class according to their needs they utilise a greater combination of senses, or rather they develop modalities of deep sensing. Furthermore, given that my findings indicate that each dancer's sensorium is flexible, and it shifts through various class environments, dancers can 'unlearn' negative habits, such as comparing their body image to the idealised balletic bodies negatively.

Some dancers explained that, after years of practice as professionals, they focused on feeling the movement (Larkings, interview, 20.05.2018; Chapman, interview, 30.30.2017; Marquez, interview, 22.02.2017). Dancers recall bodily memories to execute different combinations in class without excessive reflective processes but not as completely automatic. Many ENB, BB and DW ballet dancers[66] explained creating a foundation of their technique through their focus of attention and use of imagery. These retained information comes from sensorial information acquired in previous classes and also from their education. Yet, when the dancers inhabit different studios (ENB and DW, for example), their deep sensing is not the same, and it is not constant across different ballet cultures.

6.3 The dancer's sensorium and impact of the class, as a social space

The second research question, stated in the opening, investigated how the class, and its institutionally-set environment, may impact the formation of the dancer's sensorium. As explained in section 1.2.2, I consider ballet classes as different spaces in which social relations influence the way dancers experience sensorial input. As previously established in this thesis,

[66] Larkings (interview, 20.05.2018), Alves (interview, 12.04,2018), Marquez (interview, 22.02.2017), Oliveira (interview, 14.03.2017), and Light (interview, 10.04.2018).

the professional dancers' ways of being and learning varies depending on their institution's culture where the ballet class takes place. Overall, my findings across the three institutions demonstrate (see section 4.1) that the dancers, who experienced a teacher's sight-based approach to ballet class, mainly prioritised looking-listening learnt, which is mostly used and understood through their sense of vision. This suggests that the teacher can alter the way the technique is transmitted in class and may impact the dancer's use of senses in the process of learning. This hierarchical prioritisation of sensing limited the dancers' ability to enhance other senses involved in their learning.

This research was carried out with the awareness of Kealiinohomoku's (2001 [1983]) point that ballet class is a form of ethnic dance rooted in Western customs. Yet, I considered the professional ballet class as a complex practice, a network of influences where embodied learning was culturally and socially framed according to its environment. The dancers in my interviews also interpreted the dynamic interaction of sensorial stimuli in a specific class culture with individual ways of sensing. For example, in section 5.3, I explained how two types of breathing (breath associated with movement and physical breath) provided different qualities to the movement execution influencing the dancers' strength and dynamics. Santos' (2018) theory of epistemologies of the South discusses the idea of struggles and inequality of recognition of the ways of knowing from the Southern cultures. Based on the results from my investigation (discussed on sections 1.2.2 and 2.2), the dancers in the ballet class disseminate values of gender, such as sexism through heteronormativity, heterosexual bodies and power relations where masculinity is positioned as stronger than femininity. Ballet classes mostly lack inclusion of dancers from diversified ethnicities, and a focus on a plurality of body types is still missing. I seek to demonstrate in the context of the ballet class, that dancers have the potential to use their senses and their other ways of knowing to resist and change the inequality.

To change inequality in ballet it is important to consider the dancers' deep sensing and their different ways of knowing through a shifting sensoria. My findings show that dancers

use their senses in various sensorial ways to learn differently from the same ballet class, constituting their ways of knowing. For this reason, I investigated the situated dancers' sensorial knowledge through Santos' (2018) lens of *corazonar*. This notion goes beyond existing literature which considers bodily experiences within the environmental context to produce corporeal knowledge, such as sociologist Nick Crossley's (1995) theory. This notion of corporeal knowledge is similar to Downey's (2010a:35) term 'embodied knowledge', meaning an 'organic entity, deeply enculturated and modified by behaviour, training and experience'. Downey (2010b) also identifies that different people learn differently, even within the same environment. My study of professional ballet dancers expands the notion of corporeal knowledge, as ways of knowing by uniting knowledges and reasons with emotions and feelings, through deep sensing.

6.3.1 Dancers' sensorial engagement and decolonisation of class—the issues of race and gender

The London ballet classes are attended mostly by European dancers, and some dancers from other countries, including Brazil, Cuba, United States, and Japan. To think about how dancers from different parts of the world reason and feel emotions through deep sensing involves acknowledging how social relations and cultural beliefs influence their behaviour. Some findings from my research, as discussed in section 4.2.1, reveal dancers' feelings of discrimination, based on race and ethnicity, as well as feeling of pressure to conform to a particular body type (shape, weight, height). These findings are important to note, although full analysis of them is outside the scope of this thesis. For this study it is important to be direct about the fact that in a multicultural city, such as London, ballet dancers still experience various issues of discrimination. Clearly, such problems of stereotyping the dancing bodies

are not limited to London ballet institutions, but are found broadly in ballet culture[67]. At the three institutions investigated, the ballet dancers have different ethnicities, although most of them are White. As explained in section 4.2.1, Bourne's (2017:273) study on the underrepresentation of Black ballet dancers in Britain has highlighted the hegemony of White racial and pan-European ethnic ballet culture in London. Based on the findings of my research, this tendency still persists in most of the London ballet classes investigated, despite being a multicultural metropolis. The inclusion of multiracial ballet dancers at ENB and DW is still a long away from being equal, which is similar to what Bourne (2017) recorded in her study.

In my study it was important to make a note that the class, as a sociocultural space, still in the early decades of the 21st century is organised according to certain persisting hierarchies (of gender normativity, race, ideal body, age) and those factors limit the sensorial learning of the dancers. This was particularly reported by non-White dancers who are racialised and further discriminated on the grounds of their skin colour or body shapes and feel internal and external pressure to conform to a body ideal that is beyond their reach (as discussed in section 4.2.1).

Deep sensing may help to remove some of those habits. For instance, as I noticed, dancers may focus more attention towards proprioception. My findings in section 5.3, also demonstrated that breath can help dancers in different ways to expand their movements and engage with rhythm instead of focusing extensively on their image/body image internally. In addition, deep sensing may help teachers to focus away from ideal body shapes. That may start to change ballet culture. The touch of the teacher on the dancer is another important pedagogic tool discussed in section 4.1, but clearly needs deep ethical consideration and has to be limited to very consensually agreed terms of engagement, where appropriate[68]. In my

[67] Brenda Dixon Gottschild's (2016) book *The Black Dancing Body: A Geography from Coon to Cool* already maps the geography of the Black dancing body and shows its central place in American culture to argue for inclusivity of dancers of race and colour in dance.

[68] In my research the participants did not mention problems with the use of touch in the ballet classes they participated. However, as I explain in the introduction of this thesis, I bring this notion of ethics in the use of touch by teachers or other members of the class on ballet dancers in respect for the #MeToo movement which

study, dancers explained in interviews the value of touch in ballet learning (Gibbs, 30.05.2018; Alves, 12.04.2018; Light, 10.04.2018; Larkings, 20.05.2018). They considered touch appropriate for corrections of alignment and help with movement dynamics because it is associated with the creation of a proprioceptive memory and sometimes associated with other senses, such as vision of the movement or listening.

To understand the limited use of some senses, such as touch, one concept in the literature about sensory scale of races described by Classen (2012) and Howes (2013) was helpful (as I discussed in Chapter 1). It is not clear from my study whether this less explicit sensorial engagement with the touch perpetuated European racism. Classen (2012: xii) pointed out that a type of European racism made touch an unacceptable form of social interaction because it elicited physical emotions and an 'uncivilised mode of perception' detached from reasoning. This notion helped me think why touch is restricted as a form of social interaction in the investigated ballet institutions and how touch is associated with emotions and modes of reasoning. As illustrated in Chapter 3, the dancers touched and were touched eliciting emotions and reasoning. In this matter, my findings may help counter supremacist approaches towards the dancers' sensorium.

Similar to Classen's (2012) and Howes '(2013) idea of cultural prioritisation of some senses, Santos (2018:165) proposed that 'throughout Western modernity a political economy of the senses and sensoriality developed in terms of which hierarchies were established among the senses and people according to the orientation or acuity of their different senses'. The nineteenth century elevated to the top the hierarchy senses associated with cognition, such as sight and hearing. While at the bottom are 'lower senses, particularly developed among the lower races', such as taste, smell and touch (Santos, 2018:165). With this in mind, I draw on Santos' (2018:165) idea to consider the cultural and habitus-based difference in the experience of the senses, one which considers an 'experience of reciprocity' of the senses which can be

since 2018 discusses the complaints of bullying and sexual exploitation at leading ballet companies. In section 3.3, I also discuss the issue of inappropriate touch.

applied to all sensorial modalities. For example, I analysed from the participants' perspectives how they touch their own bodies and objects and feel their teachers' touch for corrections, how they see the space, themselves and others and are seeing by their teachers and peers, how they breathe whilst moving and how other members in class can perceive the results of their breathing through visual (e.g. chest expanding) and aural senses (e.g. sounds of breathing in or out).

In ballet cultures there is an 'idealised' image of the ballet body (e.g. in posters that hang around the ballet studios where dancers take class and in theater programmes where they perform) which mostly does not offer the inclusion of non-White dancers and diverse body types. Therefore, dancers of colour can be conflicted when they look at themselves in the mirror and compare themselves with White dancers and different body shapes and size. According to section 4.2.1, my data suggests that the balletic body, as described by the dancers, was stereotyped. BB dancer Light (interview, 10.04.2018) explained that during her ballet education, teachers would often comment on the shape of her body and the need to constantly lose weight made her feel that she did not fit the body type they desired. This stereotyped image of the ballet body influences dancers' sense of visuality in terms of their sensing, feeling and thinking to learn in class and their self-confidence.

BB dancer Coracy (interview, 13.04.2018) explained that as a Black dancer, she 'had to learn how to be' in her body to fit the ballet technique, be vigilant of looking at her body without criticism, and avoid looking at herself in the mirror in class. Another BB dancer, Johnson (interview, 06.04.2017), explained getting 'nervous about looking at his own foot ' in the mirror. Gottschild's work already states that often in ballet culture there is a false assumption of Black ballet dancers' bodies having 'less arched feet' than White dancers (2016:136). In my study, the dancers' sensoria served to communicate and gather information about social norms and beliefs, defining unequal relationships in class.

According to my findings, as exemplified in section 4.2.1, one of the dancers described how the guest choreographer treated members of her company differently from the

other two ballet companies when they worked jointly on a choreographic production. This choreographic production also affected how dancers were treated in class. In this case, the White dancers from the major companies had the freedom to wear what they desired for class and rehearsals (e.g. layers of clothes, with no formal dress code). Conversely, dancers with darker skin tones were sometimes requested to wear tights, leotards and skirts in class and rehearsals (Light, interview, 10.04.2018). This dancer reported that this made the dancers from her company feel uncomfortable because they were treated differently according to the dress codes. In the same event, whilst the White dancers could mark the movements, dancers of colour were instructed to do the movements in its full extension, as if they are performing. Many dancers in my study acknowledged the hierarchy and power relations in the ballet institutions and their cultures, and how the different rules imposed on their behaviour in turn affected their emotions. These different actions and social values of physicality of the ballet technique in class impact dancers' learning.

Apart from the issue of representation of race, another cultural value found in the ballet classes is the division of gender (discussed in section 4.2). Gender is a socially constructed element in ballet classes. This social construction occurs through the policies designed by the top hierarchy of the ballet institutions, implemented and shared as systems of knowledge between the members of each group. In each ballet institution investigated, ballet dancers are perceived in gender-binary terms (either as men or women), and roles are divided accordingly. Furthermore, dancers are required to do particular ballet steps and movements according to this classification of gender. In my study, ENB offers separate classes for men and women. This was not observed in BB and DW, who offer mixed gender classes. The representation of gender in all three venues is also a problem because of the greater number of female dancers.

How gender divisions impact dancer's senses in class are seen in several aspects, in addition to the gender division of classes themselves (male/female classes at ENB). Firstly, because the dancers embody different ways of doing specific steps in class (such as *fouettés*

pirouettes passé for women and *tour en l'air* for men), the gendered phrases already create a kinaesthetic memory based on combined senses (e.g., visual-breathing memory). Secondly, gender in ballet defines visually how a dancer should look aesthetically, thus informing internalised visual imagery. The dancers in my study mentioned in their interviews that the women are often expected to look slimmer than men, whilst men should look more muscular and taller than women (Alves, 12.04.2018; Johnson, 06.04.2017; Light, 10.04.2018; Marquez, 22.02.2017; Robinson, 16.04.2018). This already contributes to the preconception of an 'idealised' body image, which exists in each ballet culture and is further reinforced in class. Thirdly, the gendered classes develop a different type of social relationship between dancers. For example, the ENB men's class was characterised by one of the female dancers as 'relaxing', because it felt different from the competitive environment of the women's class (Oliveira, interview,14.03.2017). Such gendered values were subverted when male dancers did pointe work in class at BB and DW (BB Class 2; DW diary 08.03.2017; DW diary 02.04.2018). In these cases, when the male dancers did pointe work they were expected to move in the same way as the women, following a gendered movement in ballet technique. These topics of race and gender are important because they impact on dancers' self-image and idealisation of a ballet body disseminated in the ballet culture, in particular their senses, for instance, visuality.

6.3.2 Dancers' sensorial engagement and issues of stratification

The hierarchy plays a role in the cultural formation and ethos in ballet institutions. For example, dancers hierarchically ranked at the top (principals, leading guest dancers) can choose which class they want to attend. At ENB, the female principals can attend male classes or exchange class for Pilates/gym sessions. Moreover, the way the dancers receive feedback from their teachers (in a low voice in private to principals/soloists, or in a loud voice in front of the class to members of the *corps de ballet*) impact on the way they engage with their

senses to learn. Many dancers reported in interviews, and I also observed myself, that in the classes at ENB and BB there exists a territorial trait of occupation of space (Alves, 12.04,2018; Coracy, 13.04.2018; Light, 10.04.2018; Oliveira, 14.03.2017; Robinson, 16.04.2018). This reinforces the dancers' hierarchical position in these institutions, when, for instance, dancers ranked at the top of the hierarchy position themselves in front of the group and may offer suggestions to their peers.

The social organisation of the ballet class at BB and ENB has a pyramidal form as a common value. This is also the case for frequent dancers who attend classes at DW. The exaltation of this hierarchical structure (principals, soloists, *corps de ballet* and apprentices) sustains an unequal type of social organisation which considers some dancers with privileges, differentiating them from the others. This has an impact on the dancers' senses of visuality (how they see themselves and use their vision in class), on the dancer's haptic sense (freedom to touch parts of their bodies to learn, associated with a kinaesthetic feeling), and sometimes on the way they breathe (freedom to use their breathing to express themselves or to experiment in class). All these elements make a difference in the dancers' ways of sensing and are important to be decolonised to democratise their learning in the ballet class.

Different treatment according to the hierarchical social structure (top-down teacher-dancer and peer-to-peer) influences the transmission of knowledge and the dancers' senses in class. The use of touch can serve as a means to establish a social hierarchical structure in the ballet class. My findings indicate that teachers choose which dancers they lightly touch. For instance, when they touch the dancers' shoulder, or a knee as a correction. In consequence, the dancers feel this type of touch altering their encounter (as discussed in section 3.1). On the contrary, dancers are not expected to touch their bodies and other members in class. According to Manning (2006:9) and Hahn (2007:102), touch can be a 'political gesture'. To decolonise the hierarchical and particular ways of using some senses is important to consider, for instance, that the dancer can expand the ways they use touch to learn, opening up for reflections on new ways of sensing and sharing knowledge in class. This rationale can help to

democratise the use of the dancers' senses in ballet class.

The political and social scenario of each class bring uniqueness to the aesthetic and physicality embodied by dancers. Dancers learn and embody technique through power relationships with members in class; the teacher, peers, pianist, directors, choreographers, and rehearsal assistants, all which impact the dancers' ways of sensing. The way dancers in my study embodied movements' directions, intentions, dynamic, and expression with a particular aesthetic derive from principles of European court dances and a classical artistic tradition from the monarchical power, as stated by Grau (2011). In my study, the classes emphasised the use of verticality and this posture affected the way dancers breathe because it presented the body with a raised chest and stomach in. Principles, such as verticality, define ballet cultures and relate to the embodiment of technique through the dancers' senses. It is important to state that the sensorium could be a democratic tool for subversion of hierarchies in ballet class. By recognising that dancers have a shifting sensorium and can learn in a new way and unlearn old behaviours (which may be a negative result from hierarchical structures) the hierarchies in class may change.

6.3.3 Senses and ballet ideology

The dancers internalise the norms and ideology of their ballet culture cognitively, but also through their senses, which occurs distinctively according to each dancer at each venue, even when they take classes with the same teacher. My findings indicate that the three institutions ENB, BB, and DW differ from each other as 'cultural' environments of ballet classes in London. Yet, most DW ballet teachers are or were dancers, or are teachers in the ENB, BB, and The Royal Ballet companies, suggesting that they transfer cultural values from one institution to another (BB and DW: Nina Thilas-Mohs and Denzil Bailey; DW and ENB: Dmitri Gruzdev and Jeena Lee; DW and RB: Roberta Marquez and Sander Bloomaert; RB and BB: Deirdre Chapman and Louise Bennett).

The cultural setting of the class impacts the dancers' senses and their acquisition of particular skills in a specific environment. The dancers' engagement with values and beliefs practised by the members in class influence their cultural judgment and interpretation of their senses. In the social environment of the class, dancers learn to use self-surveillance, follow a rigorous discipline, and try to control their sensations to fit the technique. The examples of my analysis (Chapters 3, 4, and 5) indicate that dancers criss-cross their senses differently depending on their relations and engagement with the environment of the class. My data indicates that ballet dancers sense and think, developing a special knowledge of how to move with artistry in a culturally embodied process. This is similar to the concept of *corazonar*, and I named it in this thesis as multisensorial learning.

In my analysis, I was inspired by Csordas' (1993:138) argument that to attend to a bodily sensation is 'to attend to the body's situation in the world'. My findings indicate that the dancers' sensorial learning was personal. For this reason, I extend Santos' (2018) theory of deep sensing as ways of knowing in which each person develops their ways of sensing accordingly to their personal backgrounds and cultural environments they experience. As I demonstrated in section 5.3, half of the dancers discovered individual ways of breathing to help their movement execution and application of artistry. Their sensorial knowledge also in some cases gave rise to heightened states of their bodies. Furthermore, I propose that in the ballet class dancers socially learn through varied deep sensing. It would be important to consider additional concepts, for instance, those that Santos did not cover. Perhaps there are more Southern concepts and knowledges that could be included in future studies. This means that by broadening the spectrum of the dancers' ways of sensing, the ballet class can be more democratised. In what follows, I explore through the epistemologies of the South modes by which the senses intersect as ways of knowing through deep sensing, creating this effect of democratised multisensorial learning.

6.3.4 The epistemologies of the South as a methodology in the creation of democratic

The third research question from the opening investigated how do knowledges from the epistemologies of the South may contribute to create a London ballet scene with a more inclusive and democratic use of senses in the ballet class. I considered the dancers' perspective in my three case studies as a point of departure to unpack new aspects on the key postulate concepts of sensorium, *corazonar* and democratisation. Empirically, as demonstrated in chapters 3, 4, and 5, I confirmed the hypothesis that the dancer's sensorium is individualised, unique and constituted of interconnected interoceptive (e.g., breathing) and exteroceptive senses (e.g., visuality and haptic sense). The professional ballet dancer's multisensorial learning is constituted by a variety of interconnected sensorial modalities, such as visuality, breathing, touch, and kinaesthetic with emotional states in the class, which become engrained in the dancer's bodily memory.

The mode by which dancers experience a sense or sensation depends also on how they attend to internal and external stimuli. For instance, ballet dancers learn the technique according to specific aesthetic visual codifications. These visual cultural elements are presented through the dancers' bodies to the audience, such as in the use of *en dehors* and verticality. However, dancers may experience other sensations concomitantly in their learning of ballet technique. For example, in class, the ballet dancer's feet may be bleeding in her pointe shoes, yet she may represent an ethereal illusion of a human being moving effortlessly. Therefore, for these dancers, there is a tension between treating themselves as objects to learn and learning through the fusion of their sensorial, emotional, and reason as in the notion of *corazonar*.

The dancers in my study shifted between modes of attending with their senses (e.g., focus of attention, awareness, imagery) and feelings (e.g., thoughts and memories of pain, conflict, and anxiety) influencing their behaviour in the class. These interconnected processes lead to actions. In each ballet culture specific to an institution, such as a ballet company, professional dancers feel and process information from these feelings through various

mechanisms. Dancers may have an internal dialogue in their minds about what they sense. They may see visual images in their minds, recall movements' experiences in their memories, and bring awareness to a specific sense in class. All these mechanisms help dancers to learn with their senses. These senses and feelings create ways of knowing which are important to consider when studying the dancers' learning because they form changeable/flexible/shifting sensorium which can then lead to learn new ways of moving and not just confirming/learning the same things.

In the ballet practices investigated, the individual dancer, as a dancing body, builds up a special type of knowledge of how to use their senses in ballet technique and artistry. The findings, as discussed in 6.1 and 6.2 reveal that dancers in London also experience deep sensing, as proposed by Santos (2018) particularly the connection between sensing, cognitive processes/reasoning (*corazonar*) and feelings/love (*sentipensar*) are important. To democratise the ballet class requires exploring and developing physical potential and creativity abilities in different people. For example, the inclusion of people of colour, from different ethnicities, with diversity of genders, abilities and body types in distinct positions of ballet institutions and its classes may promote a multicultural and multi-ethnic environment and has the potential to transform dancers' deep sensing. This openness towards a more inclusive and democratic aesthetic image can disrupt the idealised body image associated with a specific aesthetic that dancers learn in class. Changes to the dancers' body image involve transforming the perceptions of their visuality, kinaesthetic sensations, and emotional states. These social relations in class influence the dancers' deep sensing, their emotions, and their reasoning to learn, incorporating what Santos (2018) calls as *corazonar*.

As discussed in the introduction, Santos (2018:x) presents two concepts which lie at the core of ways of knowing according to the epistemologies of the South: the concept of struggle, and the concept of experience. The goal of Santos' theory is to dismantle opposition from epistemologies which divide metropolitan and colonial societies. That is to say, the epistemologies of the South are struggles of resistance against oppression and knowledge that

'legitimates such oppression' (Santos, 2018:2). The dominant versions of the epistemologies of the North represent colonial, patriarchal, and capitalist societies. Santos' (2018:4) description of such Northern and Western epistemologies mostly focuses on the idea of knowledge conceived as independent from the experience of the subject of knowledge.

Professional ballet dancers are sensuous learners that know about the world surrounding them through various ways. The findings of my study reveal that professional ballet dancers can shift their awareness away from their physicality when they are distracted by feelings from interoceptive body sensations, such as discomfort and pain, and exteroceptive sensations, for instance, fear of falling on a slippery floor. These sensations make dancers vulnerable and affect their confidence to execute movements and steps (Alves, interview, 12.04.2018; Larkings, interview, 20.05.2018; Light, interview, 10.04.2018). When the dancers perceive a conflict between how they should feel and how they are feeling, they try to remedy it. To do this, dancers monitor their sensations based on previously kinaesthetic sensations, physical and emotional memories, through a deep sensing. Rose-Alice Larkings explained using the sense of breathing with rhythm and kinaesthesia (interview, 20.05.2018), Clare Freeman-Sergeant engaged with visuality as a way to observe and become inspired to move (interview, 13.04.2018). It was clear from my findings that to study the dancers' senses and learning also requires investigation of their affect and intellect; they cannot be dissociated.

The dancers in my study remember through the senses, as one sense is interconnected with another. The dancers experienced such sensations in passive and active relations within their cultural codes of practices. In addition to experiencing a binary sensorial memory, dancers can retain more elaborate memories involving more senses, such as a breathing-kinaesthetic-tactile-aural-emotional sensation during the *fouettés pirouette passé* (as discussed in section 5.2). The dancers may embody this execution, register it in their memory, and recall it for future performance. The dancers become used to specific ways of moving which are socially and culturally situated in the classes. This relates to Seremetakis' (1994:28)

notion of memory as a sensorial and cultural ‘mediated practice’. The previous chapters 3, 4, and 5, demonstrated the influence of the dancers’ senses and emotions on their attention, perception, memory, decision-making, consciousness, motivation to act, and consequently their behaviour and learning. This impacted the way they use their breathing (e.g., focus on breathing with the movement and the music), the way they see themselves in the mirror and how they respond to the touch of the teacher.

Nevertheless, where there was a previous trauma in the dancer’s memory and senses, this can be evoked in their professional life. In this context, dancers may develop low self-confidence, eating disorders, anxiety, and burnout, leading to injuries. For instance, some dancers mentioned shifting their focus of attention from their bodies ’physicality to their emotions (Larkings, interview, 20.05.2018; Light, interview, 10.04.2018). In my study, dancers feel emotions in connection with their senses, such as breathing, which influences their decision-making. The dancers perceive feelings by engaging with the social context of the class, such as with their teachers or peers, and these sensations are interconnected with their learning. They navigate across sensorial means, reasoning and emotional states to learn in class. In my study, I broaden the understanding of the dancer’s senses, emotions, and reasoning developing their ‘ways of knowing’ as a bodily knowledge, which I name multisensorial learning. I explored this notion through a decolonised perspective in this thesis.

6.4 Summary of Chapter 6

In this chapter, I revisited the research questions and explored the notion of sensing-feeling-thinking with examples of the dancers’ deep sensing through a decolonised perspective to democratise the ballet class. The results demonstrate that dancers apprehend and transmit the cultural values of the ballet class by attending to and with the intersection of their senses. In my study, professional ballet dancers learn through deep sensing, deep feeling, and processing information, as ‘ways of knowing’ (Santos, 2018:100-101).

The dancers learn through awareness from sensorial experiences. These may be visual, tactile, breathing and/or kinaesthetic. The individual dancer's bodily knowledge, defined in this thesis as ways of knowing, involves the multiple use of their senses, development of skills, and reflexivity. The dancers develop skills and refine their technique and artistry based on experiential bodily knowledge from their experiences with the quality of the movement. Dancers need to be considered as a whole in the ballet class, with their senses, emotions, and reasoning. This means the ballet class should focus on the demands, for example, technique and artistry, and the choreographies dancers perform, creating an environment which considers their fitness and wellbeing. By broadening understanding upon which senses are involved in class, dancers can improve their learning. A democratic and sensuous learning environment in the ballet class setting, can help reduce the dancers' risk of injury and promote wellbeing.

My findings demonstrate that professional ballet dancers learn how to execute and express intention of movements through sensing, thinking, and feeling, based on the notions of *corazonar* and *sentipensar* developed by Santos (2018) and Borda (2015). The dancers in my study embodied knowledge and learnt through deep sensing, special ways of processing the information, and thinking about these sensations in their social relations in each ballet class environment. The professional ballet dancers in the three investigated venues felt, intensified, prioritised, or disregarded some senses over others, meaning their sensorial experiences differed. These dancers focused attention, created and recalled memory and imagery and felt emotional states by using their senses to learn in class, developing multisensorial learning. This shifted the organisation of the dancers' sensoria and lead them to learn differently. The construction of a democratised ballet class regarding the dancers' sensoria requires a decolonised perspective of their interconnected senses, one which is multiracial, multi-gendered, multicultural, multi-ethnic, inclusive of different bodies (shapes, sizes and abilities) and more equal, in order to disrupt power relations and be open to experimentation and change.

Conclusions

In this thesis I have investigated ways in which professional ballet dancers learn through sensing, thinking, and feeling in ballet class. My hypothesis was that the ways in which professional ballet dancers layer multiple senses shift their sensorial involvement and as a result, they also promote more democratic learning in a ballet class. Based on this hypothesis, the original contribution of this thesis to the field of dance studies is three-fold. Firstly, on an empirical level, my findings reveal that dancers learn through the interconnection of different senses, and that their sensorial involvement is flexible, and may shift according to the class they attend. This is to say, dancers learn in varied ways through deep sensing, interweaving sensing, reasoning and emotions, but these combinations are flexible and may accommodate the changes in teaching styles, spaces of the class, and social networks—institutional settings. Secondly, on a methodological level, this study unites findings from my spectatorial/outsider observation within one culture (London, UK) with my embodied knowledge of a professional ballet dancer and teacher (from Brazil). Such an insight into Western ballet setting with perspective from 'epistemologies of the South' (Santos, 2018) has not been used so far in studies of professional ballet dancers' sensorial learning. Thirdly, with the conceptual framework I use, this study expands existing knowledge in the field of ballet dancer's learning.

Through interdisciplinary theories and studies that involve Southern ways of knowing (concepts of '*corazonar*' and '*sentipensar*'), I demonstrated that dancers learn through complex forms of sensing. Given the flexibility of dancer's sensorium, I explored a pathway that may create a more democratic learning environment of a ballet class. This study and its findings are thus opening out to inclusion of a multicultural, multiracial, multi-gendered, and neuro diverse bodies and abilities. In light of that, deep sensing can help to construct more equity in a ballet class that can recognise the relevance of the sensorial learning to the dancers.

The main research question focused on how the professional ballet dancers' engagement with multiple senses can promote more democratic learning in the ballet class. I investigated how dancers' sensorial engagement in the daily class informs their process of learning and experiencing the technique of ballet. Additionally, I explored the notions of experience of their body, their self-image, social relations, and their place in the ballet micro-cultures (institution or the ballet community in London). My findings indicate that dancers from different institutions learn to use visuality, haptic sense, and breathing as ways of knowing through the senses. These ways of knowing are important sensorial means to improve the dancers' ballet technique and artistry. These three sensorial modalities are not isolated from others; rather, as my findings showed, the professional ballet dancers in my study used their senses in multiple ways. For instance, the dancers' use of breathing shaped a broader awareness of their rhythm and movement, leading to positive learning outcomes, such as expansive movements, and emotions, including calm and confidence. In the interviews, the dancers reported that their breathing was associated with feeling of agency, and have found increased awareness of the social and internal processes of refining their technique and artistry in class. These findings lead us to observe how different ways of sensing and increased diversification of sensorial modes by which dancers engage in the process of learning are alike Santos' (2018) notions of deep sensing, and interconnected complex modalities, such as *corazonar*. In turn, I propose as one of my principal contributions, that deep, interwoven sensing can be a potent agent and a tool for decolonial learning, as it opens the possibility of new ways of knowing of ballet as a system of movement structures.

In light of the findings discussed above, this thesis argues that to study ballet from a decolonialised perspective means to consider how deep sensing may be included, as a way of knowing, a relational formation through which dancers acquire knowledge and create their sensoria in the classes. I established, through empirical research, that complex sociocultural spaces of ballet classes in three London institutions promote the dancer's flexible and multilayered sensorium. This meant that there is a potential to be observed. In line with that, the

notions of *sensorium* and *corazonar* served as the basis of my theoretical framework because they reveal how the senses, emotions, affections interface with cultural knowledge, reasons, and feeling-thinking. Santos' (2018) theory of Southern epistemologies includes various ways of knowing, whereby 'deep sensing' underlies the acquisition of knowledge and challenges the dominant Northern and Western epistemologies. I argue that this strategy could be useful for dancers' learning in ballet class too.

Given that sensorium is flexible, as I discussed in chapters 3, 4, and 5, its propensity to change and shift can assist dancers in learning of new behaviours and unlearning of old habits. This is one of the main contributions of my research. Taking into account that the dancers' shifting sensoria is associated with reasoning and emotions, dancers and teachers can benefit from this knowledge to create a more democratic environment. My findings demonstrated that dancers can benefit from learning with varied senses and ways of sensing in class. For instance, the dancers' feeling of touch from the use of props in class can help them to intensify proprioceptive sensations. The touch of the teacher and the dancers' touch on their own bodies for alignments and corrections can also help in this context. In addition, dancers can also experience varied kinaesthetic sensations whilst moving that are not only associated with their gender (e.g., male dancers can do pointe work and female dancers can work on diversified jumps which are often associated to male ballet technique). Also is important to consider the influence of the dancers' emotions and feelings in their learning in movement execution. In regards to this matter, teachers can consider the tone and volume of their voices when giving feedback to dancers, as well if it is more effective to give individual or group corrections. Teachers can also stimulate dancers to speak more about their experiences and doubts in class.

The way the social relations occur in class affect the dancers' learning. Therefore, teachers and dancers can recognise the impact of emotional bonds and social relations in class. It is not only the way dancers and teachers use their senses in class that matters but how they connect their senses to emotions and feelings, and reasoning. Broadening understanding of

the professional ballet dancers' multiple ways of sensing, thinking, and feeling which take place in each particular social environment of the class, can make their learning more democratic. The information from the dancers' multiple ways of sensing are associated with their focus of attention, memory, imagery, and emotions. Drawing on Santos' theory, I argue that a decolonised perspective of the ballet dancers' multisensorial learning is needed to promote a democratic ballet class. In my study, such perspective include the dancers' experimentation of varied ways of sensing stimulating them to learn differently. The above mentioned perspective may also include dancers and teachers applying different thinking approaches. For example, the use of the music associated with breathing, combinations with varied use of directions in space, alternated use of combinations with and without the mirror, inclusion of eyes-closed combinations, and combinations which bring awareness to the dancers' sense of weight on the floor (standing-up, laying down).

The transmission, acquisition and expression of knowledge, and embodiment of the dancers' technique and artistry connect sensing and thinking to feeling. For this reason, teachers can empathise with the dancers' learning, dancers can be compassionate with their peers, teachers, and with themselves recognising the importance of their feelings and emotions to learn. This is important because broadening the understanding of the dancers' senses may help ballet professionals to work in a more democratic environment. Deprioritising certain sensorial hierarchy (e.g., vision, and idealised aesthetic imagery) can lead to more inclusive approaches to embodied learning of the technique. In turn, such sensorially-minded strategies may also help the dancers' artistic development, by focusing on their sensations of the movement, self-confidence and expression. The dancers' artistic work relies on their education, body conditioning, and ability to express emotions. It could be argued that more sensorially-aware dancers make better artistic partners to contemporary choreographers. Although this aspect was outside the scope of my present study, the research findings of this thesis open this question as a possibility for a future study.

It is important to present here how the combined methodology in this investigation contributed to my reflective process and data analysis. My research design included participation and observation of professional ballet classes, and interviews with professional dancers from three London ballet institutions. In line with Santos (2018) and Grau (2011), this methodology approach favoured people's experiences. Such methodology enabled me to get close to the professional ballet dancers at ENB, BB, and DW to discover their cultural perspectives. The professional ballet classes were studied as networks, social and performative spaces, where dancers engage with the environment and create social relations which impact their learning in multiple ways, including sensorially. Such a multi-layered methodology, in combination with the core concepts of sensorium, *corazonar*, and democratisation, enabled me to notice a wealth of detailed information that extends beyond sensorium in the class. For instance, the combined ethnographic methodology in tandem with the conceptual framework from the epistemologies of the South, led me to notice the dancers' experiences of their social position, as well as the persistent heteronormativity and racialisation of ballet structures, including the technique and the class. Thus, the combined methodology used in this thesis revealed new knowledge about the sensorium as a channel of dissemination of various cultural values whether this was intended or not by the teacher.

Although senses at play in the ballet class are multiple and layered, the decision to focus on a particular selection of three senses (vision, touch, breath) as case studies, revealed important findings in the ethnographic setting. On the one hand, the analytical focus on one sense allowed myself as the researcher-observer and the interviewees a depth of focus which in turn revealed layered information. On the other hand, the selected case studies based on the individual sense revealed how the interconnected sensorial relationships may be formed. This is clearer when we consider the 'reciprocity' (Santos, 2018:167) in relational nexus of multiple ways of sensing. Practically, in my study, this showed how dancers perceive and relate to the world, for instance, how they see and perceive that they are seen simultaneously. Such

findings served as a basis to observe how these discrete senses connect with others. The empirical examples discussed in Chapter 3, 4, and 5 explain how other sensorial modalities can be supported through a sensorially-similar property aligned to the senses, similarly to Santos' reciprocity. For instance, in Chapter 5, I discussed how the dancers engage with their breath in a particular way in class, in association with movement and rhythm, impacting their sensing, feeling, and thinking. I illustrated specificities regarding some of the dancer's senses, their modes of perception in learning in ballet class. It was outside the scope of this study to explore in detail all dancers' sensorial modalities. For this reason, future research can expand knowledge in a similar way on other sensorial modalities, such as aural, balance, sense of weight and kinaesthesia.

The study also contributes to the field of dance studies with the investigation of three London institutions, whose ballet classes were not previously studied in depth. My focus on dancers, rather than on pedagogic structures and technique may help to decolonise their senses and democratise the ballet class. Particularly, I bring new information about sensorial modalities that can help in the democratic learning processes. In this respect, my study extends points already made by Alterowitz (2014) and Whittier (2018). Having conducted all of the above research work, I am currently contemplating on the various ways in which the findings could be implemented into my teaching.

A professional ballet dancer who comes from a foreign country, like I did, can take part in a ballet class in London but has to adapt to each specific ballet class. The complex structure of the class involves a myriad of sensorial stimuli for the dancer. The classes are different and impact the dancers' focus on sensorial patterns. Each dancer has their way of working through prioritising some senses in their sensorium depending on the class context and learning. Though the format of the ballet class worldwide is relatively uniform, there are differences in teaching. As a result, it can be argued that ballet classes in different institutions function in some ways as separate cultural environments. This information could be useful to

the ballet teachers who are interested in decolonial development of ballet pedagogy. My ethnographic findings demonstrated that the characteristics of each 'ballet culture' differ. Yet, some fixed principles and rules exist in these ballet cultures for dancers to learn ballet technique. For instance, in the twenty-first century, the ballet world still mainly prioritises visuality as a principal sense.

Ballet dancers are educated in ballet cultures, learning the acceptable behaviour of each class (e.g., presentation of the body, dress codes, ballet vocabulary, and expected understanding of the music). Despite the evolution of ballet, the ballet class is still a space of contradictions. These contradictions emerge and are engrained in the dancing bodies partly from a 'ballet culture' transmitted at the institutional level through a hierarchical structure, fixed rules, and expectations of what is a balletic body. It is also partly transmitted through the relations dancers have in class, for instance, their teacher's pedagogy and based on the professional ballet dancers' personal experiences (who in many cases are also teachers). In my ethnographic study, I perceived that individually, professionals of particular ballet companies and independent studios, also bring solutions to the problems they face in their practices. Some professional ballet dancers who are also teachers reflect on their practices in class and start to introduce techniques based on their needs to emphasise specific sensorial processes that lead to new ways of sensing.

In my research, dancers used touch as a technique to feel other sensations such as proprioception of alignment, as well as to massage tense limbs, to stretch, and to create emotional states. They also used visuality as a technique to observe their physicality, their peers, and the teacher in class. The dancers' ways of seeing was also used as practical strategy for spatial awareness related to their emotions. The dancers' use of breath occurred associated with other sensorial modalities and influenced their emotional states. As a technique, breathing was used in ballet class in relation to the dancers' proprioception, connecting what is internal and external to their bodies, and the dancers' internal rhythm linked to the musical rhythm. When their bodies heated up, breathing helped cool down the temperature. This type

of technique helped some dancers' senses to interconnect senses and reasoning. Yet, the introduction of a sensorial technique such as breathing enabled emotions to emerge. Breathing can be considered a technique which enhances some senses but also enables senses to interweave. In my study, such sensorial techniques are associated with Santos' (2018:100-101) notion of *corazonar*. Although there are other sensorial techniques which influence the dancers' sensoria, I focused on breathing, considering it through a decolonial perspective of understanding the senses.

The notion of decoloniality of the senses in my research is one of the most important contributions to the field of dance studies because it can promote more democratic learning. My findings suggest that research of the senses should be carried out taking into consideration each cultural setting and its social specificities, including other ways of knowing. This process of decolonisation needs to consider dancers as sensing-feeling-thinking agents with emotional states which influence their learning, behaviour, and in the case of ballet, their technique and artistry.

The dancers learn and embody in the ballet class the rules, policies, and implicit means of what is to be a ballet dancer in London in their engagement with ballet institutions environment. The first mode of information, perception from the environment of the class and apprehension of what is a 'ballet culture' occurs through the dancers' senses. Each dancer uses a particular sensorium to learn depending on the class. My study considered specific environments of the class influencing the dancers' prioritisation of some senses over others.

Based on my findings, I argue that an emphasis in the sensorial learning with a decolonised perspective can promote democratisation of the senses and improve the dancers' well-being and their performance in the professional ballet class. When dancers use their senses in different ways in class their sensoria shift, helping them to change their habits. Deep sensing leads to decolonise what dancers have learnt with their senses in class, in order to be able to learn other ways of moving and being.

In chapters 3, 4, and 5 I explored touch, visuality, and breathing from a deep sensing perspective as examples of principal sensorial means used by dancers. The dancers learn with deep sensing in each institutional environment of the ballet class. The three selected case studies in London reveal significant cultural differences in the ballet classes they offer: ENB as one of London's major national companies, BB as a smaller company, with a very important diversity mission, and DW as a fully commercial venue with professional ballet classes which gathers many dancers and teachers from these two ballet companies.

Some elements, characteristic and specific to each ballet institution, impact the dancers' senses to learn. One of the main differences between the investigated ballet classes as socio-cultural spaces relates to their ethos. For instance, in the two ballet companies, dancers are on the payroll and are offered classes for free as part of their work, whilst in the independent studio dancers pay to attend class. The number of dancers and teachers in each institution, their choreographic repertoire, their learning environment (e.g., gendered classes), and aspects of touring all vary and influence the shifting sensoria of the dancers. For example, dancers attend classes with a variety of teachers that have their own, personal ways of creating the combinations, following a 'standard' or more innovative class. These classes may include the use of eyes-closed or props, use multiple directions in centre exercises, or varied ways of breathing, all of which explore the dancers' sensorial learning. Some dancers also experience more freedom to adapt movements and steps according to the class.

Other elements investigated that also influence their senses in class are the hierarchical position of dancers in the institution, their gender, and race. The ballet setting, including the size of the studio/on-stage class, number of dancers in class, the conditions of the infrastructure (e.g., slippery floor), the use of mirrored walls, and the dress-code also have an impact on the dancers' sensorial learning. The values, beliefs, and policies disseminated in each cultural ballet institution setting are connected to the ways dancers sense, think, and feel and consequently to their learning. I conclude based on these findings that in order to democratise the ballet class, the senses need to be decolonialised.

My ethnographic findings demonstrate that some of the dancers' principal sensorial modalities in their sensorium are the haptic sense, visuality, and breathing. I argue that breathing is a sense in the ballet class because it is associated with the dancers' different movement qualities and rhythm which impact their learning in each specific socio-cultural setting. These sensorial modalities help dancers to learn and express intention, which is culturally grounded in the ballet class. The three examples of sensorial modalities were explored in detail in three separate chapters and analysed considering the intersection with other sensorial modalities.

There is limited scholarship that explores how dancers learn through the different senses considering the cultural context and their ways of sensing, feeling, and thinking. This thesis addresses this gap bringing new knowledge in relation to dancers' dynamic interplay of interconnected senses in the professional ballet class. Although the present study has only investigated three institutions, the findings are very complex. The overarching results include the fact that the professional ballet dancer's sensorium shifts. The way each dancer embodies the technique through the senses is interconnected and involves sensing, processing information, and feeling. The dancers' 'ways of knowing' is similar to the notion of lived knowledges (Santos, 2018:2). These findings are important for professional dancers to experience a more democratic use of their sensoria, broadening their spectrum of learning tools.

My results are encouraging because they contribute towards a decolonised perspective of dancers' sensorial learning in ballet. Other ballet macro-cultures (countries) and micro-cultures (companies, schools, and studios) may profit from considering this perspective discussed in Chapter 6. It is plausible that ballet dancers more broadly and internationally could benefit from considering the ideas of *corazonar* as a sensorial concept that connects emotions/affects/reasons (Santos, 2018), and *sentipensar* which allows for feeling-thinking (Borda, 2015). This study has strived towards enhancing the understanding of the dancer's sensorium and the acquisition of a multisensorial knowledge in ballet class. The findings indicate that the dancers learn with multiple bodily dimensions of sensing, feeling, and thinking

with their whole body in ballet class. The dancers' sensorial learning is affected by the multiple aspects of their environment in the ballet companies and independent studios, influencing their movement performance, artistry, self-image, and wellbeing.

The main limitation of this research is the complexity and subjectivity of studying the dancers' acquisition of knowledge by examining their senses in ballet class. It means looking for the essence of the embodied gesture, the theory that lies in the practice of embodiment. As a dance researcher, I often had difficulty finding the appropriate words to express how ballet dancers make sense of their embodiment and deal with the complexity of approaching the body and its senses. My findings determine that the quality of the dancers' movement, their unique expressiveness, and what they feel in class are far from being able to be translated into words. Yet, even in dance research, in academia words are the most common way of disseminating knowledge. For this reason, I aimed to use the best vocabulary available that could describe the notion of multisensorial learning and the ways dancers attend to and with their senses in class. Importantly, I also consulted the participants to create a collaborative dialogue about my perceptions of the fieldwork and findings. Another limitation was posed by the busy touring schedule of the ballet companies, which made it difficult to observe classes frequently in London. In order to solve this problem, I staggered the visits and attended open classes. When access to the institutions was limited, I selected and analysed films and archival documentation of ballet classes, rehearsals, and performances as alternative sources (e.g., films/documents about dancers and ballet companies).

Further research is needed to expand understanding of multisensorial learning approaches as ways of knowing through deep sensing in the ballet class in twenty-first century in London. In terms of suggestions for future research, it is important to investigate in-depth other senses present in the professional ballet dancer's sensorium in class through a decolonised perspective in cross-cultural studies. Based on my findings, the dancers' deep sensing of how they are feeling on the day is crucial because it impacts their behaviour and ways of

learning. Dancers may notice when they are feeling fatigued, rested, injured, healthy, emotionally exhausted or inspired. Based on the dancers' deep sensing through a scan of their senses and feelings, they can adapt the amount of effort and energy needed and limit themselves in class if necessary. A detailed investigation of this approach may help the dancers' productivity in other areas of their work schedule, such as rehearsals and performances.

Future investigations of democratisation of the ballet class may consider ways by which dancers sense and learn, with a deep sensing perspective which includes thinking and feeling. This means searching how an inclusive cultural setting in which dancers may experiment with diverse ways of sensing may impact their learning. To decolonise the way of using the dancers' senses can contribute to creating ballet environments with a democratic perspective. An inclusive, intercultural and diversified ballet class may promote the dancers' development of work ethics, passion, and talent with more equal opportunities. The creation of a collaborative practice in the ballet class means considering how dancers' senses, emotions, and reason are deployed to learn through a holistic lens. Further research may also include empirical data about dancers questioning movement execution and receiving stimuli and freedom to work at their technique and artistry.

This type of research would profit from studying a range of venues internationally and exploring variations in the dancers' sensoria. Based on such data, researchers may propose further recommendations towards the promotion of equal learning environments. This means to argue for ballet class environments which promote deep sensing and more democratic learning, with inclusive, intercultural, and diversified perspectives. I propose future investigation of ballet classes to understand sociocultural issues. These issues include race, gender, ethnicity, power relations, and discrimination between different bodies (e.g., shapes, size, abilities). I also suggest the publication of its outcomes in different venues to disseminate knowledge and promote discussion of this topic of democratisation of ballet classes through the dancers' sensoria.

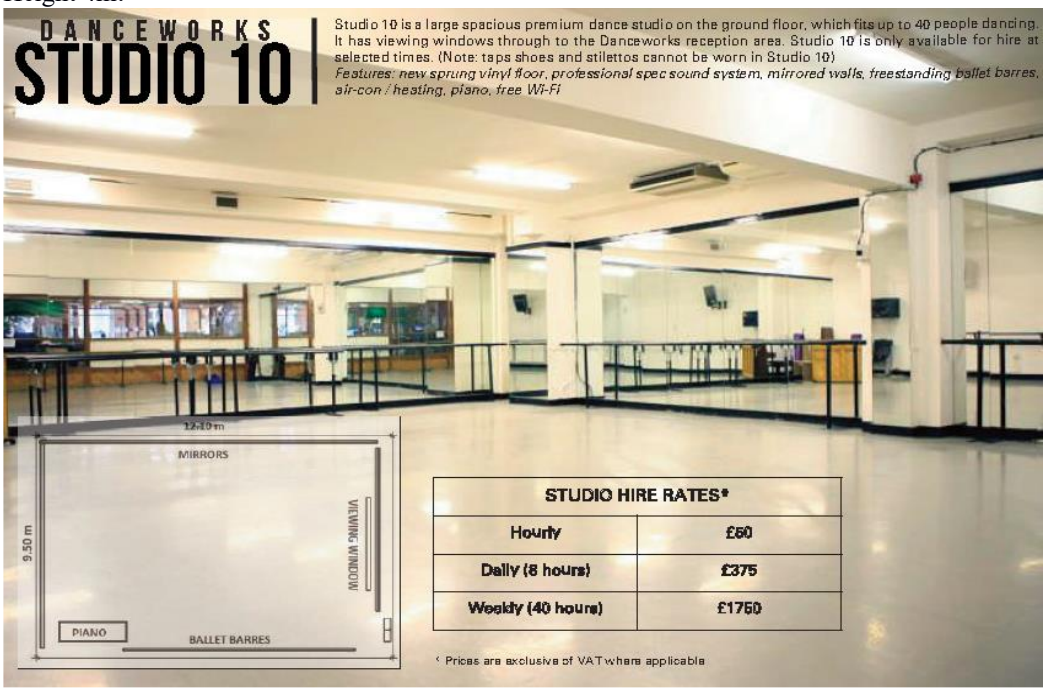
A better understanding of this topic can help professional ballet dancers to use their senses to learn in more holistic way in class. It is important to promote greater ballet diversity, inclusivity, and multiculturalism of the dancers' sensoria in ballet classes as more democratised learning spaces, more effective and sensitive to the dancer's needs. In order to do this, there is a need to consider a decolonised and balanced development of their sensoria. This perspective considers multiple ways of sensing of the professional ballet dancers.

This is particularly important given that the ballet class is a constant conditioning activity during their careers, one which prepares dancers for their daily work in rehearsals and performances. The dancers' senses in ballet class can be far better connected in a holistic and democratic way. A broader understanding of different ballet classes, rehearsals and performances, their cultures, and the dancers' sensoria through a decolonised perspective can contribute to its further development and support the dancers' performance.

Appendix A - Ballet studios' photographies

Professional ballet classes' institutional space

DanceWorks studio space where mixed-gender professional ballet classes occur, measuring 9,50 x 12,10 m. Height 4m.

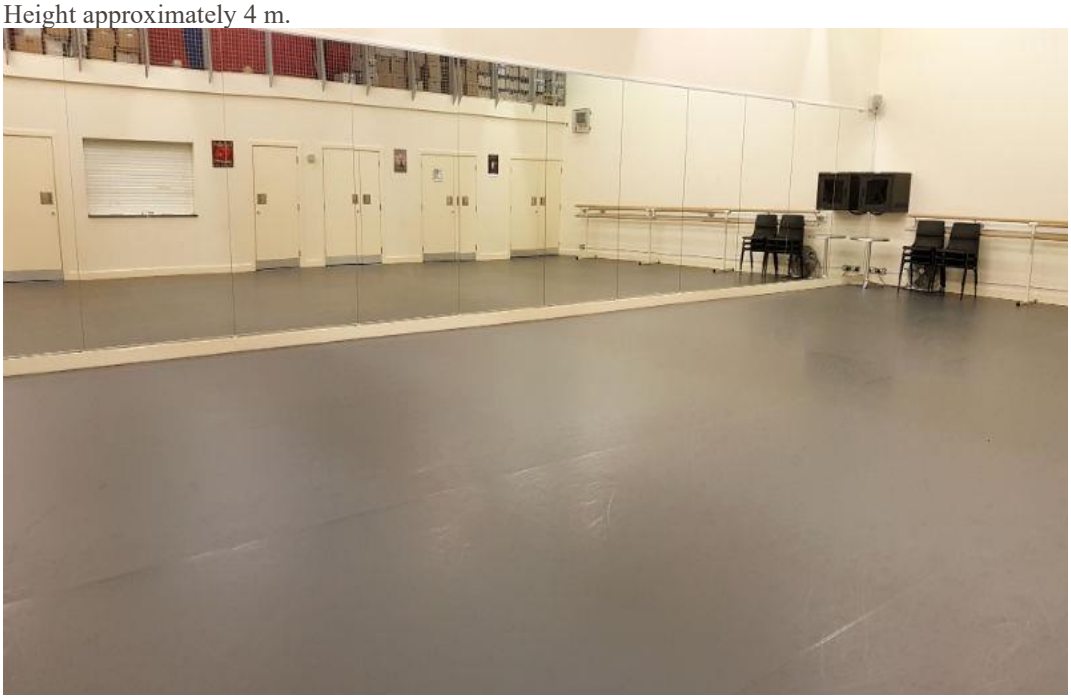


Credits: DanceWorks. Available at: http://danceworks.net/wp-content/uploads/2011/01/danceworks-studio-hire.pdf (Accessed on 20.01.2018).

Ballet Black L-shaped studio space where mixed-gender daily classes occur, measuring 6.7m x 9.14m with extra 3.6m x 3.6m. Height 2.8m.

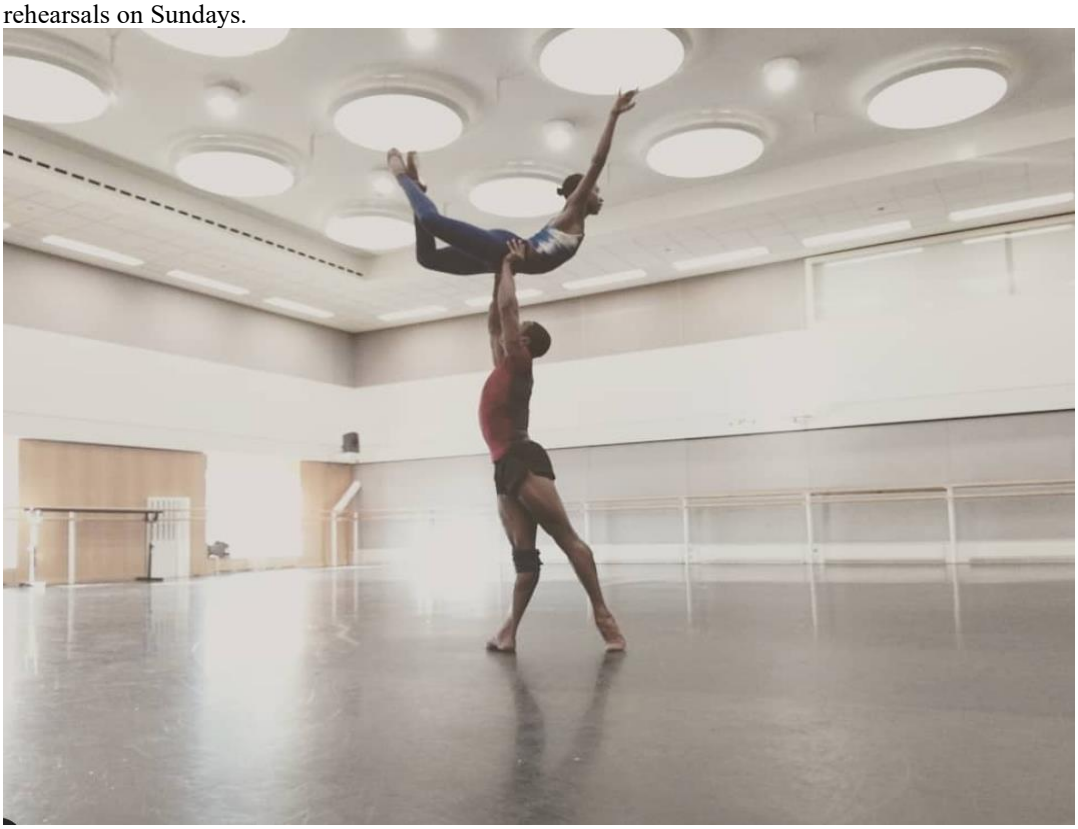
Credits: London Dance. Available at: http://londondance.com/directory/dance-resources/studio-space-space-xchange/marylebone-dance-studio/ (Accessed on 20.01.2018).

Ballet Black new studio since January 2018, where mixed-gender ballet classes occur measuring 14m x 7.8m. Height approximately 4 m.



Credits: Ballet Black. Available at: http://balletblack.co.uk/studio-hire (Accessed on 20.01.2018).

Ballet Black partnership with the Royal Opera House, enables the company to use studio for class and rehearsals on Sundays.



Featured on this picture dancers José Alves and Cira Robinson. Credits: José Alves on 20.01.2019. Available at: https://www.instagram.com/p/Bs29V6WAdby/ (Accessed on 13.02.2019).

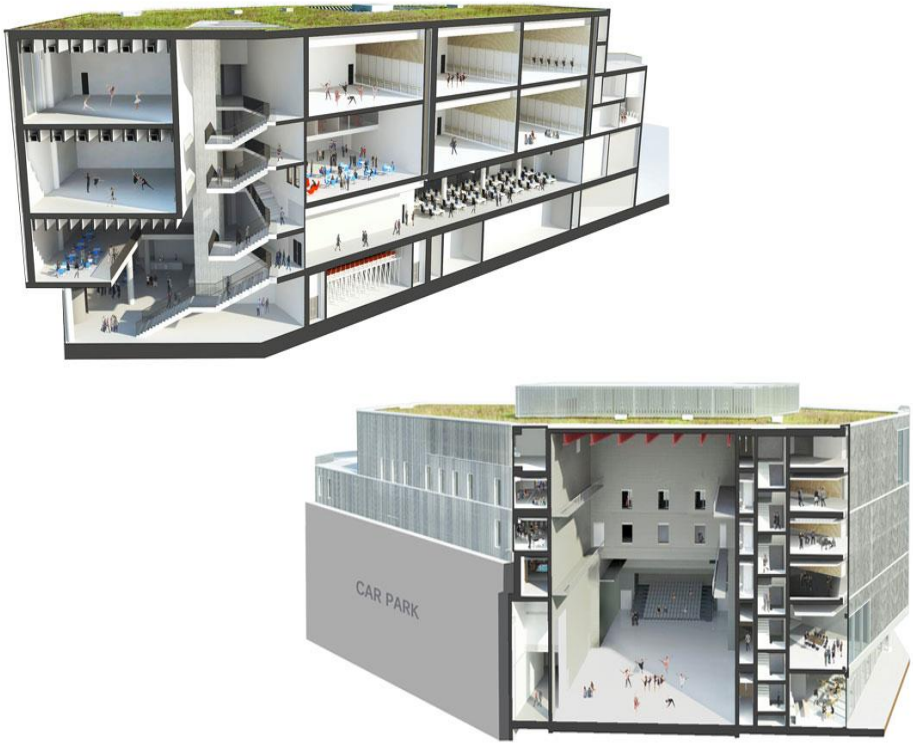
English National Ballet studio 1 where the women's daily classes occur, measuring approximately 40mx20m, height 16m.

Credits: Royal College of Music. Available at: http://www.rcm.ac.uk/about/news/all/2015-10-29rcmexchangescontractsforpurchaseofmarkovahouse.aspx (Accessed on 20.01.2018).

English National Ballet studio 2 where the men's daily classes occur, measuring approximately 20mx 12m, height 8m.

Credits: Four Square. Available at: https://pt.foursquare.com/v/markova-house-english-national-ballet/4d5a70d424466ea80fb3819f?openPhotoId=530fa8ce498ece01b812e960. (Accessed on 20.01.2018).
English National Ballet new home since August 2019 with eight studios in Canning Town London.

Credits: Glen Howells Architects. Accessed on 20.01.2018. Available at: < https://glennhowells.co.uk/project/english-national-ballet/>



Credits: Glen Howells Architects. Available at: https://glennhowells.co.uk/project/english-national-ballet/ (Accessed on 20.01.2018).

English National Ballet Nureyev studio in their new home on City Island.

Credits: The Nureyev Foundation. Available at: https://nureyev.org/opening-of-the-enb-new-building-on-city-island/ (Accessed on 20.09.2019).

English National Ballet studio in their new home on City Island.

Credits: English National Ballet. Available at: https://www.ballet.org.uk/venue-hire/ (Accessed on 20.09.2019).

Appendix B - Participant consent

University of Roehampton London

PARTICIPANT CONSENT FORM

Title of Research Project:

Multisensory experiences and embodied knowledge of professional ballet dancers in daily ballet class

The present research aims to investigate how the dancer's senses are interconnected to the acquisition of embodied knowledge in the daily ballet class depending on various environmental cultural settings of professional ballet institutions. This research interest emerged from my personal experience as a professional ballet dancer over the last twenty-four years. It will privilege the dancer's perspective on the senses in ballet class (for example, visual, hearing, taste, smell, touch, breath, heartbeat, body temperature, pain, pleasure, kinaesthesia, fatigue, energy, pressure senses).

This qualitative study will happen through observations of daily ballet classes, followed by interviews with dancers, followed by further observations of daily ballet classes.
The observation of ballet class will occur inside ballet institutions -companies and independent studios- and last for the period of one hour and fifteen to up to one hour and a half (this would be the approximate period I will spend observing each ballet institution's class). Regarding the class size, the selected institutions vary number of dancers' members in training. I will consider observing, for example, the dancers present in each class depending in the availability of each of them. Observations of each ballet class can involve approximately twenty-five dancers in a studio or on-stage depending on each institutional venue. I will observe as much classes as possible in a week (maximum five classes a week, ideally once a day, and institutional ballet venues could be alternated).

I am planning to interview at least six dancers from three institutional venues, totalizing eighteen interviews. Each interview will last approximately one hour and may occur inside the institutional venue or in a public venue such as Cafe. I expect the observations to last approximately one year (2017) considering the three venues altogether. If the time is not convenient for interviews with some dancers or observations of ballet classes at companies, data collection will be continued during the beginning of the year of 2018.

The contribution of this research will emerge through new findings about different ballet institutional settings as environments which influence the dancer's learning through sensorial experiences. This finding may enable an enhancement of methodologies of teaching and learning.
In this respect, it is a hope that the study will bring new knowledge to dance professionals in different institutional settings. Findings will be published in a doctoral thesis.

In this interview I will ask you about your personal experiences during ballet class.
I will take notes during the ballet class observation and interview. During interview I will ask your permission to audio record our conversation in order to ensure accuracy of your answers. As you are an experienced expert dancer, your perspective and point of view on the topics discussed are relevant to this research. You will retain right to remain anonymous in this thesis, as well as in any citations that may be used.

This interview can be discontinued at any point and my notes destroyed at your request. Also, at or after the interview you may designate any part of the interview as off the record or not for attribution.

I will be available at all times to respond promptly in case any queries may emerge concerning the research and interviews.

Investigator Contact Details:
Name Doris Dornelles de Almeida
Full time PhD Student Dance Department
Roehampton University
Address: Roehampton Lane, London – U.K.
Postcode SW15 5PU
Email: dornelld@roehampton.ac.uk
Telephone: 02083923643

Consent Statement:

I agree to take part in this research and am aware that I am free to withdraw at any point without giving a reason, although if I do so I understand that my data might still be used in a collated form. I understand that the information I provide will be treated in confidence by the investigator and that my identity will be protected in the publication of any findings, and that data will be collected and processed in accordance with the Data Protection Act 1998 and with the University's Data Protection Policy.

Name …….

Signature ……

Date ……

I (as a participant of this research) wish to be anonymous: yes ___ no ____

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the investigator (or if the researcher is a student you can also contact the Director of Studies.) However, if you would like to contact an independent party please contact the Head of Department.

Director of Studies Contact Details:

Name Professor Andrée Grau
University Address
Department of dance
Froebel College
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Appendix C - Interview guide

INTERVIEW GUIDE WITH BALLET DANCERS

These interview questions were inspired by previous interviews with dancers present in studies of Salosaari (2001), Pickard (2015), Potter, (2007), Roses-Thema (2007), Dornelles de Almeida and Flores-Pereira (2013), and Ravn and Hansen (2013).

1. Describe a daily ballet class.
2. Where do you focus your attention during ballet class? Please give examples.
3. How does your perception of sensory experiences (vision, hearing, tactile-kinaesthetic, smell, taste, fatigue, pain, balance, temperature, expulsion, pressure - flexibility, shrunk/stiff, swallow) influences your dance performance at the ballet class?
4. How does the context – space, time, people- influence your experience (body) in ballet class?
5. How does the teacher's/other dancers' stimuli affect your dance performance in class?
6. Can you describe the act of marking and how does it help you?
7. Describe how do you use imagination, idealization or projection of a movement before or after its action to help its execution?
8. Explain how does dance makes you feel?
9. Describe the difference between ballet class, rehearsals and performance.

Appendix D - Ethics application DAN 2016/028 final approval

Ethics Application Ref: DAN 16/ 028 - Final Approval

Jan Harrison

Thu 23/03/2017 08:45

To: Doris Dornelles de almeida (Research Student) <dornelld@roehampton.ac.uk>;

Cc: Sara Houston <Sara.Houston@roehampton.ac.uk>; Andree Grau <A.Grau@roehampton.ac.uk>;

Dear Doris,

Ethics Application
Applicant: **Doris Dornelles de Almeida**
Title: **Multisensory experiences and embodied knowledge of professional dancers in daily ballet class**
Reference: **DAN 16/028**
Department: **Dance**

Many thanks for your confirmation that you accept the final versions of the documents. Please ensure that you replace the previous version of these in your files. Under the procedures agreed by the University Ethics Committee I am pleased to advise you that your Department has confirmed that all conditions for approval of this project have now been met. We do not require anything further in relation to this application.

Please note that on a standalone page or appendix the following phrase should be included in your thesis:

The research for this project was submitted for ethics consideration under the reference DAN 16/028 in the Department of Dance and was approved under the procedures of the University of Roehampton's Ethics Committee on 23.03.17.

Please Note:

-

- **This email confirms that all conditions have been met and thus confirms final ethics approval (it is assumed that you will adhere to any minor conditions still outstanding, therefore we do not require a response to these).**
- **University of Roehampton ethics approval will always be subject to compliance with the University policies and procedures applying at the time when the work takes place. It is your responsibility to ensure that you are familiar and compliant with all such policies and procedures when undertaking your research.**
- **Please advise us if there are any changes to the research during the life of the project. Minor changes can be advised using the Minor Amendments Form on the Ethics Website, but substantial changes may require a new application to be submitted.**

Many thanks,

Jan

Jan Harrison
Ethics Officer
Research Office
University of Roehampton | London | SW15 5PJ
jan.harrison@roehampton.ac.uk | www.roehampton.ac.uk
Tel: +44 (0) 20 8392 5785

Appendix E – Glossary of ballet vocabulary

À la second means in the second. It is a 'term to imply that the foot is to be placed in the second position, or that a movement is to be made to the second position *en l'air*. As, for example, in *grand battement a la seconde*. It is one of the eight directions of the body in the Cecchetti method (Grant, 1982 [1950]:130).

Attitude derived by Blasis (1830) it is a position in one leg with the other lifted in back, the knee bent at an angle of 90 degrees and well turn out so that the knee is higher than the foot (Grant, 1982 [1950]:9).

Adage, Adagio is a 'French word derived from the Italian adagio, meaning at ease or leisure. English ballet teachers use "*adage*," the French adaptation, while Americans prefer the original Italian. In dancing it has two meanings: (l) A series of exercises following the centre practice, consisting of a succession of slow and graceful movements which may be simple or of the most complex character, performed with fluidity and apparent ease. These exercises develop a sustaining power, sense of line, balance and the beautiful poise which enables the dancer to perform with majesty and grace. The principal steps of adagio are *pliés, developpés, grand fouetté en tournant, degagés, grand rond de jambe, rond de jambe en Fair, coupes, battements tendus, attitudes, arabesques,* preparations for *pirouettes* and all types of *pirouettes*. (2) The opening section of the classical *pas de deux,* in which the ballerina, assisted by her male partner, performs the slow movements and *enlevements* in which the *danseur* lifts, supports or carries the danseuse. The danseuse thus supported exhibits her grace, line and perfect balance while executing *developpés, pirouettes, arabesques* and so on, and achieves combinations of steps and poses which would be impossible without the aid of her partner' (Grant, 1982 [1950]:12).

Allegro is a term applied to all bright and brisk movements. *Grand allegro* means big elevations which may involve *cabriole, entrelacé, grand jetés, pas de chat* and *grand sissone ouverte,* just to name a few (Grant, (1982[1950])). *Petit allegro* means small. All steps of elevation' such as the *entrechat, cabriole, assemblé, jetés.* 'The most important qualities to aim at in allegro are lightness, smoothness and balloon' (Grant, 1982 [1950]:12).

Avant, en. means forward. A direction for the execution of a step. Used to indicate that a step is moving forward. (Grant, 1982 [1950]:11).

Balance in this thesis means '*equilibre, equilibrium*; aplomb. The ability of the dancer to balance and hold a pose. The balancing of the body on *demi pointe* or full point in any required position' (Grant, 1982 [1950]:64).

Battements means 'a beating action of the extended or bent leg. There are two types of *battements, grands battements* and *petits battements*. The *petites battements* are: *Battements tendus, degagés, frappés* and *tendus relevés*: stretched, disengaged, struck and stretched-and-lifted (Grant, 1982 [1950]:26).

Batterie means the 'French technical term for beaten steps. A collective term meaning the entire vocabulary of beats. Any movement in which the legs beat together or one leg beats against the other, the actual beating being done with the calves. Both legs must be equally well extended during a beat. Never beat with one leg while the other is in a passive state. *Batterie* is divided into *grand batterie* and *petite batterie*, according as the elevation is large or small' (Grant, 1982 [1950]:34).

Chaînés means chains, links. This is an abbreviation for the term '*tours chaînés déboulés':* a series of rapid turns on the points or demi-pointes done in a straight line or in a circle. (Grant, 1982 [1950]:29).

Corps de ballet means the dancers in a ballet who do not appear as soloists (Grant, 1982 [1950]:33).

Croisé, croisée means crossed. It is 'one of the directions of *épaulement*. The crossing of the legs with the body placed at an oblique angle to the audience. The disengaged leg may be crossed in the front or in the back' (Grant, 1982 [1950]:48).

Coupé means cut, cutting. A small intermediary step done as a preparation or impetus for some other step. It may be performed *sauté* or as *à terre* step, *croisé* or *effacé* (Grant, 1982 [1950]:34).

Derriére means in the back (Grant, 1982 [1950]:39).

Devant means in front (Grant, 1982 [1950]:40).

Developpé à la second means the foot is drawn up to the *retiré* position front or back before extending the leg to the second position en lair (Grant, 1982 [1950]:41).

Écarté means separated, thrown wide apart. Écarté is one of the eight directions of the body, Cecchetti method. In this position the dancer faces on of the two corners of the room. The leg nearer the audience is pointed in the second position *à terre* or raised to the second position *en l'air*. The torso is held perpendicular. The arms are held en attitude with the raised arm being on the same side as extended leg. The head is raised slightly and turned toward the raised arm so that the eyes look into the palm of the hand. (Grant, 1982 [1950]:42).

Effacé means shaded. 'One of the directions of *épaulement*, in which the dancer stands at an oblique angle to the audience so that a part of the body is taken back and almost hidden from view. This direction is termed '*ouver*t' in the French method. Efface is also used to quality a pose in which the legs are open (not crossed). This pose may be taken *devant* or *derriére*, either *a terre or en l'air* (Grant, 1982 [1950]:58).

En dehors means a term from French School for turn out (Grant, 1982 [1950]:47).

Enchaînement a combination of two or more steps linked to fit a phrase or music (Grant, 1982 [1950]:47).

Épaulement means shouldering. The placing of the shoulders. A term used to indicate a movement of the torso from the waist upward, bringing one shoulder forward and the other back with the head turned or inclined over the forward shoulder. The two fundamental positions of *épaulement* are *croisé* and *effacé*. When *épaulement* is used the position of the head depends upon the position of the shoulders and the shoulder position depends upon the position of the legs. *Épaulement* gives the finishing artistic touch to every movement and is a characteristic feature of the modern classical style compared to the old French style, which has little *épaulement* (Grant, 1982 [1950]:64).

Fondu means sinking down. It is a term used to describe a lowering of the body made by bending the knee of the supporting leg. Saint-Leon wrote, '*Fondu* is on one leg what a *plié* is on two'. On some occasions the term *fondu* is also used to describe the ending of a step when the working leg is placed on the ground with a soft and gradual movement. An example of this is *jeté fondu*. (Grant, 1982 [1950]:67).

Frappés means struck battement. It is an exercise in which 'the dancer forcefully extends the working leg from a *cou-de-pied* position to the front, side or back. This exercise strengthens the toes and insteps and develops the power of elevation. It is the basis of the *allegro* step, the *jeté'* (Grant, 1982 [1950]:30).

Grand battements mean large battement. It is an exercise in which 'the working leg is raised from the hip into the air and brought down again, the accent being on the downward movement, both knees straight. This must be done with apparent ease, the rest of the body remaining quiet. The function of grands battements is to loosen the hip joints and turn out the legs from the hips. Grands battements can be taken *devant, derriere and a la seconde*. To execute a *grand battement a la quatriéme devant* start in the fifth position R foot front. In one sweeping movement, slide the R foot to the fourth position front (fourth position *croisé*), pointe *tendu*, raise the foot to the fourth position front *en Fair*, lower the foot to the fourth position pointe *tendu* and slide the foot back to the fifth position front. *Battements a la seconde* and *a la quatriéme derriere* are done in the same manner. In the execution of *grands battements a la seconde* the working leg closes alternately in the fifth position front and back' (Grant, 1982 [1950]:26).

Jetés means throwing. For instance, a petit j*eté* may occur from a '*demi-plié* in the fifth position the working foot glides along the floor until it reaches a position *a la demi-hauteur*. The supporting foot springs from the floor and the landing is made in *fondu* on the working leg with the other foot extended in the air or sur le cou-de-pied'. It can be done *dessus, dessous, en avant, en arriére and en tournant* (Grant, 1982 [1950]:80).

Manège means combinations executed in a big circle across the room that may contain *pirouettes* (Grant, 1982 [1950]:70).

Ouvert this refers to 'open'. The second and fourth positions of the feet are positions *ouvertes*, limbs, directions, or certain exercises or steps. In the French School it may 'indicate a position or direction of the body similar to *effacé', for instance, 'a la quatriéme devant ouvert or effacé devant* (Grant, 1982 [1950]:92).

Pas de deux means dance for two (Grant, 1982 [1950]:80).

Passé is the terminology used by teachers and dancers at the institutions investigated referring either to the *passé* movement and *retiré* position. However, in the ballet terminology passé means 'passed. Used to describe any activity in which the front leg is passed to the back and vice-versa. Ballet teacher, choreographer and writer Richard Glasstone (2001:40) mentions that the term *retiré* passé is often abridged to *passé*'. For ballet teacher and dancer Gail Grant (1982 [1950]:81) *passé* also means 'an auxiliary movement in which the foot of the working leg passes the knee of the supporting leg from one position to another (as, for example, in *developpé passé en avant*) or one leg passes the other in the air (as in *jeté passé en avant*) or one foot is picked up and passes in back or front of the supporting leg (as in *chassé passé*)'. While *retiré* 'describes an action of withdrawing one foot from a closed position of the feet and raising the thigh to second position *en l'air*, with the knee bent, and the tip of the pointed foot resting just below the front, at the side or at the back of the knee of the supporting leg. Sometimes called *passé* or *en tirebouchon*. In Balanchine's, Vaganova's and Legat's style *en tirebouchon* means the position in which the thigh is raised in the second position and the tip of the pointed toe touches the knee of the supporting leg (Grant, 1982 [1950]:62). A *petit retiré* will be raised only to just above the *cou-de-pied*' (Glasstone, 2001:49). *Retiré* is 'a position in which the thigh is raised to the second position *en l'air* with the knee bent so that the pointed toe rests in front of, behind or to the side of the supporting knee' (Grant, 1982 [1950]:97).

Penchée means leaning, inclining (Grant, 1982 [1950]:81).

Pirouette means whirl or spin. A complete turn of the body on one foot, on point or demi-pointe (Grant, 1982 [1950]:84).

Plié means bent, bending. A bending of the knee or knees. This is an exercise to render the joints and muscles soft and pliable and the tendons flexible and elastic, and to develop a sense of balance. There are two main types of pliés: grand plié or full bending of the knees (the knees should be bent until the thighs are horizontal and demi-plié or half-bending of the knees (Grant, 1982 [1950]:88).

Promenade means in a walk. A term of the French School *Tour de promenade* used to indicate that the dancer turns slowly in place on one foot by a series of slight movements of the heel to the required side while maintaining a definite pose such as arabesque or attitude (Grant, 1982 [1950]:92).

Tendu means stretched (Grant, 1982 [1950]:119).

Retiré 'describes an action of withdrawing one foot from a closed position of the feet and raising the thigh to second position *en l'air*, with the knee bent, and the tip of the pointed foot resting just below the front, at the side or at the back of the knee of the supporting leg. Sometimes called *passé* or *en tirebouchon*. A *petit retiré* will be raised only to just above the *cou-de-pied*' (Glasstone, 2001:49). *Retiré* is 'a position in which the thigh is raised to the second position *en l'air* with the knee bent so that the pointed toe rests in front of, behind or to the side of the supporting knee' (Grant, 1982:97).

Rond de Jambe means round of the leg, that is, a circular movement of the leg. Ronds de jambe are used as an exercise at the bar, in the centre and in adage, and are done à terre or en l'air (Grant, 1982 [1950]:99).

Appendix F - Interview sample

Damien Johnson Interview sample. Date: 06.04.2017 Time: 12-12.35pm at the company headquarters in London.

Principal Dancer and also often teacher of the company.
D-Describe a ballet class.
J: I guess for beginners. You know for people who never dance before it is important to get them moving and to give them just some sort of workout and make sure they understand the positions about it, the arms, and then also coordinating with oppositions, opposite arms, as well as using their breath.
Breathing, which I am thinking is so important. Specially because people that are beginners are not aware of it, even professionals do it, something is hard you bite your lip, or hold your breath. I think try just to have them moving and breathing and connecting their body just been aware and coordinated with oppositions in ballet.
For the professionals, the first thing, I think of is the music. Because at this point it just helps you to get inspired. And it really, I try you keep the music different and fresh. Because we do this, every single day, and then after that I try to make sure that dancers can feel the floor in first position a lot, and if they are warming up their arches and their toes before going to fifth. So, a couple of slow things in first, gorgeous music. Then we move fifth with a couple of transitions of weight. And the centre I really just try to keep them moving as well, if they are beginner, constantly moving and moving. And then perfecting their technique like with different tempos, maybe like a slow pirouette and then a really fast one. Or the same with jumps, slow and then really faster, faster, faster and faster.... Exactly to emphasise dynamic and then been pushed to that limit where you feel it is too fast, I can't do it, to bring a little bit to this country speed... so New York.

D: What about in the beginning some dancers do the class with socks or with flats.
J: I don't mind it at all. I used to get in a lot of trouble when I was with the Los Angeles ballet even when I go back to New York my teachers want me to use shoes right away. But I really like to be in socks, either the entire barre or at least until the rond de jambes to warm up that last little pinky [little toe of the foot], really to let it spread. Because with shoes… it is just stuck, and I feel that you really cannot feel that which makes your heals to go forward. And as soon as you wake that up, it will sooner make your turn out a bit more… and your line... So that's why a lot of teachers are not ok with me [he laughs].
So I have these things like 'yoga toes' [prop], that I hang out, did you see when I was using them there in the back? They are amazing! And I use these other things in my ballet shoes. Rubbers to use inside, the feet, (to spread the toes) also to wake up that little [toe]. I got them from Japan, my acupuncturist is from Japan, and I were them in my normal shoes. [He takes out the prop and shows it to me]. So, this and the 'yoga toes' are really nice. It helps definitely, definitely!
D: How do you feel about the space that you are in, the studio. Does it affect your performance in class?
J: I think this space is still a bit tight. But the good thing about this space is having all the windows and the light, it makes it seems a little bit more open, less tight and bigger. But this is simply because the way this studio is built, and that can kind of mess up the way you think or when you are doing the class suddenly; 'ahhhhh there is a wall!'. I have done this big jump and when you land, there is another step, there is a barre or a wall. So, a lot of times you feel a little held back, so you cannot go out and do everything. But yeah, that is this space. You have to learn really how to use the space and change directions.
It is like, even at the pirouette, you have to do pique left, to just save that much in the room, rather than do it to the right and travel up lately. So, what I do as a teacher planning of how to be creative, just because you know we are used to do the big jumps and that sort of thing, and that when it comes the most difficulty within the space. One thing is also funny. It doesn't

happen that much because we are tinny but when we go to a bigger space we are like ‘wow!’ We do ballet here for like ages [many years] but as soon as we are in that space we are like (he breaths heavily and explains that the dancers runout of breath in the bigger space doing the same movement).
And then perfecting their technique like with different tempos, maybe like a slow pirouette and then a really fast one. Or the same with jumps, slow and then really faster, faster, faster and faster.... Exactly to emphasise dynamic and then been pushed to that limit where you feel it is too fast, I can't do it, to bring a little bit to this country, speed... so New York.

D: Are there things you use as props that are common or not?
J: I have these things like ‘yoga toes’, that I hang out... Did you see when I was using them there in the back? They are amazing! And I use these things in my ballet shoes. Rubbers to use inside, the feet, (to spread the toes) also to wake up that little toe (from orthopaedics?) I got them from Japan my acupuncturist is from Japan, and I were them in my normal shoes. (He shows it to me, rubber) So this and the yoga toes are really nice. It helps definitely!

D: What about the mirror, the relation with the mirror?
J: Oh gosh, I hate the mirror, I try not to look at it. Just because you become so obsessed. Sometimes is also me, like I am nervous, like 'I am nervous to look at my foot'. But I think that people like to go one way or the other, like, obsessed with the mirror always looking at it, or like never; not getting / forgetting it all. Sometimes I feel I only look at the mirror for like rehearsals. Just because it is a spacing, and you are kind of clocking yourself in the mirror and who is behind you, specially the first time you are learning a ballet. Just because you kind of… you can't always have a sense of who is behind you.
So really to able to visualise it and have hopefully that muscle memory eventually when you turn away from the mirror is still there. But you know, you are just doing that there and that I am in the relation with each other. Do you know when sometimes you are a bit closer than they are, so sometimes the mirror can get you in trouble because it looks like there is space and you just crash and there is someone behind you, but...
D: What about the timing, you said before about this speedy class, how do you think that influences your class? Either when you are planning to teach them a speedy class, or yourself how do you feel that influences in your body?
J: I think that you have to have different tempi and different accents. Like I usually start accent out, and first and out and first. Plie, tendus out in first. And then after that I would do in and first and in and first, in and in and in and plie. This sequence fits with counting of the music, [He sings the dynamic of the movement]. Rather than just doing much… that out (accent). That is something I really miss here try just don't use that: ‘and one!’ [meaning the *contre-temps* of movements within the music counts]. Here in England, they are always moving ‘and one and two’.... They don't move on the ‘and’ of the music-dynamic. They don't move on the ‘and’... (of the music-dynamic) ‘and’ one ‘and’ two, so that is what I try to bring it here, that accent ‘in’ and the ‘and’. That is important!

D: What about the relationship with other dancers in class, do you think there is any kind of competition or do you think it is inspiring? How do you feel with the presence of the other dancers?
J: Well in the school it was very competitive. Now that we are in a company I see more as a supportive environment, of course if you look around and there is someone that does like five turns, like: ‘ok, I want to...let me try as well!’ But I think that it is a more encouraging and inspiring, like as if we were more inspired by each other, and while teaching as well. Especially now that I am a ballet master teaching, I really want them to do well. So, I think it can of inspire each other. I think that I like to leave more people to do what they want and for them to do more of a couple of general things. About other teachers they will definitely give general corrections, they will of course go around and say: ‘Do this...tarataratа’. At the barre and don't always use the head but at the centre I start dancing and moving.

D: What about repetition? What do you do about that?
J: I think repetition at the barre definitely helps you, and repetition at different speeds, we can progressively go faster. I can place that to do faster, and then I will start to pick up the speed and picking up the pace a bit. You need to take yourself back, as if it is almost as if you are doing a triple [turn] and falling out. I think you should just spend a little time balancing, because it could be just that you slept funny and your shoulders are a bit just throwing everything of, so I think just give yourself time to kind of not keep beating yourself up, to really figure out why thus mistake keeps happening.
I try, I try a couple of times in the corner, try to think each parts,... I talk to myself, just trying to say, sometimes just look at it! Look at it, your hip is up, just put it down, fix it! A lot of times I talk to myself just from looking at myself. And try to fix the mistake. Then I am scared to look....
D: And when you are not being able to look?
J: When I feel a little, I guess I would like probably take my leg lower to just take it slower or just you know, just do singles. Or just balance. I guess I just (to kind of centring) yeah simpler definitely.
D: imitation, I don't know if this is a good word but, you said inspiration, do you usually see a shape, you see a dynamic, would you like, what do you do with it?
J: I do, like my teacher would always demonstrate so you see someone that is doing great you: close your eyes, see it, and now go and do it. And surprisingly it works most of the time. Like, it really, really, really does work. So, imagine what you really imagine it how you want to be dynamic or executed the tempo is supposed to be, see that, and then you just....
In the centre I do, in the centre I do, it is kind of rare that I will go like in the first group. Because I like to take a couple of breaths in here and play and think about how I want to do it...how I am going to phrase it so it will not be all even...
D: Can you describe when you are teaching or doing the class?
J: When I am teaching in schools you a lot if touch. I used to sit down on the floor and turn them [the dancers] out or pointe their toe. Or you know just say: 'Think about this, abdominals'. And suddenly is like you [he demonstrates in his body] ...and also like big toes in arabesque people always may pull their toe away, to have that feeling [he shows the turn out of the foot in his body].
D: what about touching yourself?
J: I do that all the time. So that engages like when I am at the barre. When I am on the side, to squeeze a pressure point or something like that. But I do, I am always pulling my feet.

D: Do you think that it makes a difference when the day is really warm or cold?
J: I want to sweat, I want all the time that like to get really, really warm. Then I take it out layers of clothes. Definitely in the winter I have to get there much earlier just because it is too cold, and just warming them up and warming up your ankles, it takes much longer the winter months in here. When we get to the studio you know…the radiators we just push them up. To feel you know...D: What about other preparation?
J: I feel like, every week I take a Pilates once or twice, I have a personal trainer, I so gyro tonics and I always try to have nine hours sleep, which I do not know. In the morning I ty to eat porridge and have a strong coffee. And yeahh that is kind if a routine especially now that I am getting older and older, I am getting just to maintain…
D: Do you usually mark, you just look, do you like to mark with your hands or just your whole body?
J: Usually my hands, I will mark when I am teaching and just kind of own my hands.
D: How does that help you?
J: I guess to have that feeling of just kind of that tempo and just really showing it clearer than just me having to do it with my body, over and over which is. When there are other teachers, I will still do it with my hands. And stretch and then repeat the exercise.
D: What about connection to the other dancers. Do you look, talk, turn your backs?

J: we do chat a little. But in the centre, I try not to. Because we are trying to see that step and do it, but a lot of dancers do that more and I have always been kind of that way, that I talk so much and we are especially close that practically, we have so many inside jokes, that teacher would not say something, they wouldn't realise.

D: How do you feel about a ballet master that is making jokes and the other way around a ballet master that is always saying this is not right this is not right?
J: I think you should have nice mix of both, I think you should really like have someone that really stoops and really criticises you, your technique. Someone that will allow you to still go to get warm, still going to work on your technique but is also going to be a little bit light hearted.
D: How does dance makes you feel?
J: Oh, it makes me feel amazing and alive. And energy means everything to me because I try to give and receive positive energy. And I also try to make sure that I don't give it all away and keep some for myself. But is also great when you meet people, and you can feel that they are gracious person, and you can feel that flowing back and forth. Which totally recharges you.
D: Do you feel that this happens in training rehearsal and performance or one more than the other?
J: I think that all of them I feel it, especially performances the most. I give and receive. And then I feel them in training as well, hopefully, sometimes you are feeling a little bit empty because you have given it all. Especially when you are performing a lot. Sometimes you just feel like...sometimes when it is gone you feel just like way down and heavy. Like of someone is on your shoulders you know.

D: what is the difference for you of dancing in class, in rehearsal and performance?
J: Well, class is my selfish time, is totally for me I am getting warm, I am really making sure I am hit fifth, pointing toes, stretching my legs, it is really what is in my head. Then rehearsals what I really usually go for it. Just to push the limits, push the boundaries, and try everything that I know might not work on-stage or might work on-stage. And then by stage I kind of know what I want to do, there are times that you just get so lost in the music that take the plan and kind of goes of the window... or because you are like kind of losing yourself and that cokes from class and rehearsals that you prepared enough that allows to be able to just lose yourself. Because all of your technique is so strong and solid, and it is there, and on-stage you can just really give and be free.

Appendix G - ENB Class observation sample
(This sample was taken *in verbatim* from the author's field diary)

Date: 25.04.2017 Time: 10.15-11.30 am.

At 9.50am I arrived at the company workplace, at the Markova House, near Kensington Palace and Royal Albert Hall in London. It was a sunny cold day of spring. After entering the main doors, I presented myself to the receptionist and explained that the company assistant wrote me authorising my presence to observe the class for my research. The receptionist was having breakfast while checking her agenda and told me she was aware of me coming to observe the company class that day. She said to me I was early, and I replied that I did not wanted to be late for class. She asked me to sign the registration entrance book with my name, purpose of visit, time and date. And she explained that I had to sign my way out in the end of the class as well. She told me to seat and wait for the coach by the entrance door. While seated in a coach in front of the receptionist I noticed at the wall a huge poster of the Giselle production for ENB from Akran Khan with Tamara Rojo as a solo dancer jumping in a *cambré*. There was also in the waiting entrance also a small picture at the wall a frame of a founder dancer of the company. Sitting from the coach I realized for the first time, as this was my fourth visit to the company headquarters, that there was a white model of the new home of the institution representing the construction of a huge theatre and building which will be the company and school headquarters in 2019. Some dancers arrived slowly at the main entrance by 9.55, 10.05 and signed the book, and some of them looked at me. Other employees of the company also arrived to work and signed the book. The postman came and the receptionist and two women came to make a surprise to an employee. At 10.10am the receptionist authorised my presence and said if I needed water coffee or something else to serve myself at the kitchen.

The women's class was upstairs on the 2nd floor. An administrative staff came to guide me to the studio. The entrance of the studio was through one main door in the central point of the room. It was a huge studio with very high ceiling, with a big chandelier, one piano, and a space by the side of the studio for observing the class, where most dancers left their personal belongings, some of them warmed up, used rosin on their pointe shoes. The studio looks like a castle ballroom. At the wall next to the piano there was a picture with a written tribute to the founder of the company.

At 10.10am when I entered the studio many dancers looked at me. The director was there taking class with the company and one of the soloists looked and smiled to me. There were twenty-seven dancers warming up and stretching. They were doing *penchée*, massaging their calves, stretching their backs by moving them in different directions- backwards and sideways sitting at the floor. Other dancers were manipulating their feet with elastics. Some were using foam rollers for muscular distress. Some dancers were putting their pointe shoes on and checking the visual aesthetics of their feet in the mirror, while chatting in pairs or groups of three. Some dancers were checking their phones, others looking at themselves in the mirror at different parts of their bodies. Some dancers stretched with their eyes closed. I could see their ribcages opening while they were breathing deeply and stretched more deeply enabling them to extend their flexibility. Some other dancers were arriving, others pulling the mobile barres they were going to use in the centre positioning themselves by choosing their spots for class to begin. Most dancers had little bags near them at the barre with extra clothes pointe shoes and ballet props as elastics. The ballet master arrived, talked to a dancer for a while and touched her lightly, rubbing her shoulders, offering a little massage to that dancer while talking to her briefly.

A soon as the pianist arrived at 10.15am, all dancers stood up next to their places at the barre and waited to look at the ballet master to start the class. The teacher gives a cue orally for the musician to start playing.

Women in class all left the area of the ankles of their feet visually available. The dancers were either wearing tights, legging, or were without any clothes in their ankles letting their skin to appear. The regions of their backs and abdominals were mostly covered for the beginning of the class, some of them were wearing coats with no sleeves or blouses tight to the body. Most dancers wear leotards underneath layers of clothes with different ballet designs and colours. Each dancer gives a personal imprint in their clothing in class, with various styles, fabrics, and types of clothes. One third of female dancers wore pointe shoes since the beginning of the class until the end.

The teacher only talked the sequences through to instruct the first three exercises of the barre.

1) First the teacher just talked the sequence briefly, saying: 'Facing the barre, warm up, *demi rond de jambes à terre, demi pliés in first and second position*'; without marking. At this first exercise facing the barre dancers looked at their alignment of the first position at the mirror.

2) This exercise was also facing the barre to warmed up the dancers' feet through the use of half pointe/pointe. It also stretched the hamstrings in seventh position and included bending the body forwards in second position, a few *demi rond de jambs à terre* and footwork for pointe or flat shoes. The teacher allowed the dancer to do 'freestyle' stretching or change the combination a bit depending on the dancers' need. For example, instead of doing *cambré* in seventh position some dancers stayed longer stretching at the seventh position forwards. The corrections were offered by the teacher in the middle of the exercises, while she was walking around the studio and instructing dancers modes of improving the movements.

3) The teacher only instructed the dancers by dictating the combination. The sequence was short and included only *demi pliés and grand pliés* in first, second, fourth and fifth positions. The exercise was done starting with the right-hand side and repeated to the left-hand side without a pause in between both sides.

4) The fourth exercise at the barre focused on tendus in fifth position and with a few moments of footwork on half pointe. Furthermore, it included working on the dynamic accents of the *tendus* through various modes sometimes in synchrony with the musical accompaniment. For instance, two *tendus*- one in and one out followed by two tendus with accent in. The tendus moved in the directions front, side and back.

At this exercise there was the only dancer with soften boots. This type of soft boots dancers used before class to warm up their feet. This dancer kept it longer and took them of in the end of this exercise staying only with her flat ballet shoes, and at the centre exercises she changed for pointe shoes. The ballet masters touched many dancers for corrections, in particular focusing on the alignment of the dancers' hips, spine and arms position. For example, the teacher touched a soloist dancer to align her pelvis. From this exercise onwards the teacher marked all the steps just with the legs with no arms positions.

Appendix H - BB Class observation sample
(This sample was taken *in verbatim* from the author's field diary)

1) BB Mixed Class Date: 10.04.2018 Time: 10-11.15.

I woke up at 6.30 am to prepare for my observation at the new venue of the company. I was curious to see the new studio as the old one – because of its size made very difficult for dancers to do class. As I got out of the bus, I walked for fifteen minutes to get to the venue. It is a big building which offers different activities during the week. Next to the doorstep there was the name of the company at the buzzer. One of the dancers her the bell and let me in. The dancer came to the entrance and at the same time the director of the company greeted me. Because it was a few months since I had to wait for observe classes with the company as they were touring, thus I did not see them for a while. Therefore, I decided to explain again my research to the director and gave her the participant consent to sign. She took the paper and said to me that the dancer was going to accompany me to the studio where the class was going to occur ad for me please to take my shoes off before entering the studio.

The teacher this morning was new, therefore this was her first class teaching the company. She is RAD style and is going to teach the company once a week. As I entered the studio, I noticed that it is bigger than the previous one, with high ceiling, and windows on the ceiling enabling the daylight to enter and bright the room. There are mostly portable barres and two walls with fixed barres. The teachers choose a playlist of ballet musical accompaniment/recorded music to be played at the electronic device at the classes in this studio. One of the dancers came to greet me and I found a place at the corner of the studio which would give me good visibility and will not interfere in the dancers' daily class. I asked the dancer that was positioned in front of me if I was interrupting his view of the mirror and if it was ok for me to seat in the floor next to him. I preferred to sit on the floor so dancers could have a full view of the mirror without having to see me all the time. I knew that my presence would make dancers aware that I was observing them. For this reason, I tried to explain many times in different occasions what I was doing by observing them making them comfortable with my presence as much as I could. Most dancers of the company came to greet me or waived from their positions at the barre before the class started. Although there were five guests in this class, not members of another company which were participating in a production together, and for this reason they all did class together. The studio was spacious, with one big, mirrored wall, and a second-floor balcony where there were seats facing the studio, very clean and organised.

Most of the dancers were already warming up at the studio, on the floor, with elastics, massage balls, and other props. Some of them with headphones and others were chatting in pairs. The class was composed by seven dancers from BB which were spread around the studio at the barres, and five guests which positioned themselves at the middle barre staying next to each other. The dancers of the company are all Black and Asian descendant, and the guest dancers were all White coloured skin.
Linoleum was brand new, there was a bit of storage on the second floor.

The teacher presented herself to the dancers and managed tested the electronic device where she was going to play the music for class, because the company does not have a pianist.

After the dancers warmed up and the teacher announced to start the class, they stood up and faced her waiting for her instructions on the first exercise at the barre. One of the dancers told me that he had an injury on the tendons from running because on Easter the company had a break and he wanted to exercise to stay fit. He ran daily and got his tendons of the feet inflamed. Before the class started, he was rubbing pain relief/anti-inflammatory creams. He also explained that he needed use painkillers pills to be able to dance. For this reason, as he was

treating an injury, he did only the combinations at the barre. And before the class started, he walked towards the teacher and excused himself explaining that he was injured and that he would leave the class before the centre exercises to be able to attend the rehearsals right after class at 11.30 am.

Barre:

The teacher started marking the exercise and counting the musicality desired. She positioned herself at the second barre next to the electronic device where all dancers could see her. She said: 'First position. Prepare. See how your bodies are feeling today. What do you notice about your body?'. Her words remembered me of the way the yoga teacher of I practice starts the class. Her guidance had the intent to begin the class, by bringing the dancers focus of attention and awareness to their internal states of their bodies. She continued her guidance while the dancers were only at the first position preparing to start saying: 'First thing, feel your alignment, and the top of the head stays float'.

1) First exercise was facing the barre, including a sequence of tendus with variations of stretched and flexed foot and inclusion of *cambrés* sideways. The pace of the music was slow, giving time for dancers to focus on footwork and alignment of their bodies.

   I noticed that the focus of most dancers at the first exercise facing the barre, was to look at their own feet or at their movements at the mirror. Some of the dancers were touching their hips or on the muscles that support the spine, looking for alignment. I could hear the sound of the dancers' breathing patterns, which were positioned next to me at the barre.

   The dancers were breathing out to stretch in the *port de bras* or stretch their hamstrings in sixth position or seventh position. The music ended and the teacher guided dancers to do an extra balance with the spot of the head moving to the side, and up and down during the balance/equilibrium, which the teacher did not mark and added last minute to the exercise.

   The teacher guided dancers to train other sensation of proprioception of the balance with the use of other head movements. Moving the head even in a single balance of 6^{th} position affected the dancers making them fall from their balance.

   The teacher also asked some questions to the dancers stimulating them to think on the movement execution. The dancers did not respond immediately, and the teacher waited for a response to continue.

   The teacher was promoting an interaction verbally with the dancers. She asked them: 'Was it easier to move the head?', one of the dancers responded by shaking her head 'yes', and teacher says, 'good for you! but it is not common to be easier, it is often harder to move the head during balance'.

2) The second exercise was composed by a sequence of *cloches attitude devant/derriére* and sideways. The teacher did not demonstrate and only dictated the exercise. Before she played the music to start the combination, she amended the quality of the movement by pointing out: 'No high (extension of the legs), just to warm up.'

Appendix I - DW Class observation sample

(This sample was taken *in verbatim* from the author's field diary)

Date: 08.03.2017 Time: 10-11.30 am

I prepared to class, slept and ate early, to be rested and enjoy the ballet class in the next day. I was really excited to do class, and to meet the teacher which I saw dancing on performance as a principal at the Royal Ballet. Because I wished her class was good making me feel comfortable to participate. I woke up early, 6.20am to eat breakfast slowly. I was getting dressed, putting my tights when I realised that since I was three, I were ballet tights to do class and perform. At 8.15 in the morning, I left the house. The trip by bus and tube took one hour and twenty minutes was long and crowded with people. Getting at the studio was easy from the station.

There was a glass window where people can see the studio from the reception, which also enabled the daylight to enter the class. The studio had a friendly environment, and the receptionist was very attentive. She made a registration for me and I got a card with my name and paid the two pounds to enter in the studio. I could see from the reception that there were two females and one male dancer warming up before class.

I went to the ladies' changing room and got my personal belongings to class with me. Because this was the first class of the day the studio was empty, and the dancers could warm up inside the studio. The studio was not big neither too small, depending on the number of dancers the class would have. That class had enough space for everybody to move because it only had with twelve dancers.

I positioned myself in an empty space, and I started to warm up. Some dancers before class were trying pointe shoes on, stretching their feet and looking at their aesthetics in the mirror. Some dancers used pointe shoes during all the class. The teacher entered the studio at 10pm sharp, she had her ballet clothes on. She was wearing a legging and a sweater under the coat and just changed for tennis dance shoe to start the class. The class was without pianist, although there was a piano in the room. The teacher used the electronic device attached to her cell phone to play the music she selected for the class. The teacher greeted some ballerinas individually, saying that she was happy to see them there. I was next to the mirror in diagonal from the teacher. I presented myself to the teacher at the end of the class and explained I was doing a research about professional ballet dancers' senses and my participation in class was a part of it. The structure of this class was complete including all the main exercises to work the dancers' bodies:

-Barre 1) Warm up facing the barre, 2) *Pliés*, 3) *Tendus* with *posé plié* in 4rth, 4) *Jetés* with *pointés*, 5) *Ronds de jambe, pas jeté and rond en l'air*, 6) *Frappés* simple and double in half pointe, 7) *Fondus*, 8) *Adagio*, 9) *Grand battement*, 10) Freestyle stretch was given between the barre and centre.

Between barre and centre the teacher received the fees for the class - eight ponds, in a red box that was on the top of the piano. Sometimes when the other group was doing the combination at the centre, I experimented the movement to get a second, or third chance to feel it.

-Centre: 11) *Tendu* in with turn/*pirouettes passé*, 12) *Adagio* with *promenade, developpé* and *pirouettes passé*, 13) *Pirouettes* in diagonal, 14) Warm up with small jumps, 15) *Petit assembles* and *entrechat quatre*, 16) *Petit jetés, temps de cuisse, pas de chat, pas de bourré* (short sequence repeated six times), 17) Big jumps in diagonal with *entrelacé* and *saut de chat*.

The class started and from the way the teacher created the sequences in the music I felt that the coordination between using my breathing patterns and the music played was fundamental to execute the movements in the class. For me the use of breathing gave more impetus to the following movement.

At the barre the teacher sometimes repeated once most of the exercises, while at the centre some exercises were repeated twice or three times.

The teacher corrected the dancers sometimes with a gentle touch and a delicate voice. On some occasions the teacher demonstrated the full out version of a movement explaining and offering a visual image of the dancers could do it. She complimented the dancers when they did movements and for me it this made dancers to try more difficult steps and movements to polish their technique.

The time for the movements executions was often with dynamic accents out to hold the positions, for example, in the combination of the *fondus relevés*. On the sequences of the thirty-two *fouetté en tournant en dehors* the teacher showed the importance of the dancers' coordination of their arms in a la second helping the impetus along with the *plié* to close the *passé relevés*.

Before doing *pirouettes*, the teacher suggested dancers to press the floor offering impetus for the movement. I focused on that, and additionally was aware of the feeling of the centre of the body, to hold my abdominals and placing the pelvis, breathing in and spotting with the head while balancing on my axis and holding the suspension of the turn.

1) First combination of movements. Warm up in front of the barre, right and left-hand sides one after the other without pause in between. Tendus fourth *posé* with *plié*, front, side and back, *cloche demi rond/ cambré* side and back.

The teacher did full out the exercise while explaining the dynamic, and I marked the movements with my legs and arms to feel the coordination in my body and memorise each detail. When the teacher created the *pliés* exercise with the arm positioned in a *la seconde*- without the use of port de bras.

While I was marking, I noticed the other dancers in class were not moving and only observed the teacher. These dancers when the exercise started began to move their arms, doing the opposite of what the teacher demonstrated. They did not notice the teacher instructed the arms to be positioned a la second until the teacher corrected them during the exercise.

The teacher dictated the sequence during the exercises, leading us through the combinations.

2) *Pliés*, sequence of two demi *plié*s and one grand *plié*, *cambré* sideways, which was created in first, second, fourth and fifth positions including one *ramarsé* in half pointe in fifth position to end. And a balance in half pointe. The teacher instructed the dancers by saying: 'Always close the fifth position and hold it!'.

Appendix J – List of performances attended

1. Wheeldon's Programme *After the Rain/Strapless/Within the Golden Hour,* RB[69], 17.02.2016
2. Wayne McGregor's *Creative Learning,* Random Dance, 14.03.2016
3. *Giselle,* RB, 6.04.2016
4. *She said,* ENB, Sadler's Wells Theatre, 15.04.2016
5. *Whatever-ing,* Roehampton University, Michaelis Theatre, 18.04.2016
6. *Schubert, Sad case and Some other time,* Netherlands Dance Theatre Sadler's Wells, 20.05.2016
7. *Swan Lake,* ENB, Royal Albert Hall, 5.06.2016
8. *Winter's Tale,* RB, 7.06.2016
9. *Soft virtuosity, still humid, on the edge and Henri Michaux: movements,* Marie Choinard, Sadler's Wells Theatre, 20.06.2016
10. *Carlos Acosta Farewell,* Royal Albert Hall, 6.10.2016
11. *La Fille Mal Gardée,* RB, 22.10.2016
12. *Giselle,* ENB, 23.10.2016
13. *Chroma/New Mc Gregor/ Carbon Life,* RB, 19.11.2016
14. Rehearsal *Nutcracker,* ENB, 21.11.2016
15. *Nutcracker,* ENB, 23.11.2016
16. *Nutcracker,* RB, 28.12.2016
17. *Woolf Works,* RB, 1.04.2017
18. *Sleeping Beauty,* RB, 22.11.2017
19. *Ballet Black Triple Bill,* BB, Barbican Theatre, 1.03.2017
20. *Ballets Russes Gala,* London Coliseum, 12.03.2017
21. Dress Rehearsal *Pina Bausch Hans Van Manen and William Forsythe,* ENB Sadler's Wells, 22.03.2017
22. *Jewels,* RB, 11.04.2017
23. *Mayerling,* RB, 11.05.2017
24. *The vertiginous thrill of exactitude/ Tarantella/ Strapless/ Symphonic dances,* RB, 23.05.2017
25. *The dream/ Symphonic variations/ Marguerite and Armand,* RB, 10.06.2017
26. *An American in Paris,* Musical, 23.06.2017
27. *Gala for Grenfell,* Adelphi Theatre, 30.07.2017 (with dancers from ENB, RB, Mariinsky Ballet, Wayne McGregor Company, Boy Blue Entertainment, Matthew Bourne, Akram Khan, Jasmin Vardimon Company and JV2 ZooNation), 30.07.2017
28. Kiev Ballet, 20.08.2017
29. *Giselle,* ENB, Sadler's Wells, Akran Khan, 23.09.2017
30. *Mozartiana, Konzert fur orchester, The concert,* Ballet am Rhein Dusseldorf, 5.10.2017
31. *The Judas Tree and Song of the earth,* RB, 01.11.2017
32. *Song of the earth,* ENB, 24.10.2017
33. *Gloria, The Judas tree, Elite Syncopations* (with RB, NB, BRB and SB), ROH, 27.10.2017
34. *Illustrated Farewell/Twyla Tharp,* RB, 28.10.2017
35. *The Wind,* Arthur Pita, RB, 7.11.2017
36. *Untouchabl*e, Hofesh Shechter, RB, 6.11.2017
37. *Amore* Svetlana Zakharova and guests, Coliseum Theatre, 21.11.2017
38. *Sergei Polunin,* Sartori, Coliseum, 5.12.2017
39. *Sylvia,* RB, Opera House, 6.12.2017
40. *Nutcracker,* RB, Opera House, 18.12.2017
41. *La Sylphides and Jeunne homme et la mort,* ENB, Coliseum Theatre, 19.01.2018
42. *Ballet Gala,* Savoy Theatre, 28.01.2018
43. *Warsaw Ballet,* Polish Opera House, 18.02.2018
44. *Giselle,* RB, 1.03.2018

[69] RB productions took place at the Royal Opera House.

45. *Ballet Black Double bill,* BB, Barbican Theatre, 15.03.2018
46. *Manon*, ENB, Coliseum Theatre, 13.04.2018
47. *Voices of America,* ENB, Sadler's Wells Theatre, 18.04.2018
48. *Autobiography,* Wayne McGregor, Sadler's Wells Theatre, 27.07.2018
49. Natalia Osipova, *Pure Dance,* Sadler's Wells Theatre, 14.09.2018
50. *Les Ballets Trockadero de Monte Carlo,* Peacock Theatre, 21.09.2018
51. Matthias Sperling, *Now that we know*, Institute Neurochoreography, Lilian Baylis Sadler's Wells Theatre, 2.11.2018
52. *La Bayadére,* RB, 13.11.2018
53. *The unknown soldier, Infra, Symphony in C,* RB, 28.11. 2018
54. *Les patinateurs,* RB, 19.12.2018
55. *Duo Concertante,* RB, 20.01.2019
56. *Swan Lake,* ENB, Coliseum Theatre, 8.01.2019
57. *Totem,* Cirque du Soleil, Royal Albert Hall, 13.01.2019
58. *Manon,* ENB Coliseum Theatre, 19.01.2019
59. *Asphodel Mixed,* RB, 2.02.2019
60. *The Idiot,* Saburo Teshigawara, The Print Room Coronet Theatre, 28.03.2019
61. *Don Quixote,* RB, 30.03.2019
62. *Russian Icons* Ballet Gala, Coliseum Theatre, 31.03.2019
63. *Against the Stream Ballet Gala,* The Coliseum, 7.04.2019
64. *ENB Emerging Dancer*, ENB, Sadler's Wells Theatre, 7.05.2019
65. *Medusa, Flight Pattern and Within the golden hour,* RB, 8.05.2019
66. *Dogs without feathers*, Deborah Colker Dance Company, Southbank Theatre, 10.05.2019
67. *Firebird,* RB, 4.06.2019
68. *Cinderella on the round,* ENB, Royal Albert Hall, 7.06.2019
69. *Ballet Black Double bill*, BB, Linbury Theatre, 14.06.2019
70. *Spartacus,* Bolshoi, ROH, 30.07.2019
71. *The bright stream,* Bolshoi, ROH, 7.08.2019
72. *Manon,* RB, 9.10.2019
73. *Merce Cunningham Centennial,* RB, 10.10.2019
74. *Concerto Mixed,* RB, 5.11.2019
75. *Ballet Black Triple Bill*, BB, Stratford Theatre, 8.11.2019
76. *Coppelia,* RB, 29.11.2019
77. *Sleeping Beauty,* RB, 2.12.2019
78. *Nutcraker,* ENB, 18.12.2019

Appendix K - Stylistic and sensorial variety found across ballet techniques

Ballet is taught worldwide with variation in styles across many cultures and traditions. According to philosopher Nelson Goodman 'style is a complex characteristic that serves somewhat as an individual or group signature' restricted to works, performances and objects of art and one may 'grasp a style without being able to analyse it into component features' (1988:34/36). Style 'consists of those features of the symbolic functioning of a work that are characteristic of author, period, place or school' (Goodman, 1988:35). In Western theatre dance, dance scholar Adina Armelagos and philosopher Mary Sirridge (1977) explain that style is a two-fold concept. First, the dancer 'learning to dance in a style, is learning the characteristic inventory of movements and movement sequences as they relate to more general ideas of movement, in the case of ballet, line and fluidity' linked by a system of kinaesthetic motivation as a sense of the pattern of movement flow, second, what is best called the dancer's 'personal style' of moving , an articulation of a more general spatial vocabulary, which works within those constraints, such as the style of Pavlova or Fonteyn (Armelagos and Sirridge:18/19). According to philosopher Graham Mcfee (1992) a style can be located in a web of artistic concepts, discerned through codes and conventions. In ballet, these characteristics can involve the training style, cultural context, influences, geographical location, era, and own dance background. It is important to briefly list historical styles of choreography and the names of their creators because they are associated with the variety of ballet styles taught in the professional classes, forming different ways of moving. The style of the ballet class and the method or variations of methods the teacher applies influence the way dancers embody the movement, positions, musicality, dynamics, directions, orientation in space, number of repetitions, impacting their technique and/or artistry. Therefore, it is fundamental to identify the characteristics of the style dancers are taught in class.

Morris (2003:20) explains that 'all training methods are stylistically informed and thus imbued with certain values'. These values are ingrained from particular training methods (pedagogy), leading to particular stylistic outcomes (approach to movement), such as: 'The Royal Academy of Dance (1920–) (Espinosa, 1920; Ryman, 1997), the Cecchetti system (1922–) (Beaumont & Idzikowski, 1947), the Bournonville system (1861–), the Vaganova system (1934/37–) or even Balanchine's approach (in Ashley, 1984; Schorer, 1999)', illustrates Morris (2003:19). For her, the dancer's style 'is not wholly personal but is largely shaped by their training' (Morris, 2012:37). Ballet dancer, teacher and dance writer Joan Lawson (1960:19) characterises style 'based on the academic rules and technique', and the subtle differences in a classical, a romantic, and a modern ballet can be distinguished within, for example, the dancer's *port de bras* style. The stylistic variations in ballet choreography emerged in different countries over time. Nevertheless, the existence, maintenance, and extinction of such ballet styles depend on the political and social scenario of each period and place, according to historian Ilyana Karthas (2015).

The ballet class needs to train the dancer to be prepared for learning a range of repertory requirements. This is because today ballet companies perform a variety of ballet choreographic styles. The choreographer Balanchine (Balanchine and Mason, 1975 [1954]), dance writer Francis Mason (1975 [1954]), historian and dancer Jennifer Homans (2010), and dancer Viviana Durante (2018) all described some of the choreographic styles which are performed by the dancers of the two ballet companies investigated. English National Ballet performs romantic, classical, neo-classical and contemporary ballets, and Ballet Black performs mostly neo-classical and contemporary ballets.

The ballet techniques and schools used in the classes in my fieldwork were not the same for all venues. Some systems of ballet training and ballet methods are particularly relevant to my discussion because the teachers at the institutions investigated followed particular elements of the following ballet techniques, such as The Royal Ballet School System of Training (ENB, BB, and DW teachers), Cecchetti method (BB and DW teacher), RAD syllabus (BB and DW teachers), Balanchine technique (BB and DW teachers), Vaganova method

(ENB and several DW teachers) and Cuban method (ENB teacher). Some teachers use variations or blend of these systems of training or methods in addition to transmitting their own pedagogic and stylistic qualities to the technique. To assess which system of ballet training (syllabus or teaching method) were used in the classes investigated I analysed the stylistic elements based on the teachers' and dancers' descriptions about these classes in their interviews. I also made stylistic descriptions in my field notes from the classes I observed and participated and have consulted the teachers' biographical information provided by the institutions where they work (ENB 2019; BB 2019; DW 2019).

It is important to discuss different ballet systems of training in this thesis because the ballet pedagogues' choice of method's and schools' stylistic elements in class and their modes of teaching influence the dancer's corporeality and heighten particular parts of her/his sensorium. The following section explains briefly characteristics of the main elements used by teachers in London from each ballet system of training – method, school or technique. According to Morris (2012:37/39), the formalisation of training started in 1926 in the U.K. and dancers at that time - mostly Russian émigrés, were trained in varied movement methods and schools. The teachers can combine elements from different ballet methods and schools, diversifying their teaching. Two institutions at that time had a great influence on the education and professionalisation of ballet dancers in the U.K.: The Royal Ballet School, and the Royal Academy of Dance – RAD.

The Royal Ballet School System of Training

The Royal Ballet school system of training is characterised by the dancer's very soft and mobile upper body with the use of *port de bras*, intricate *staccato* [meaning performed each note and respective movement sharply and quickly] and articulated speed of the footwork. The Royal Ballet system of training is based on the legacy of Dame Ninette De Valois[70]. The Royal Ballet company developed particularly with De Valois' classes and Frederick Ashton's works as a choreographer and ballet teacher.

De Valois (1898-2001) was an Irish dancer, choreographer, teacher and director. She was trained by Edouard Espinosa, Enrico Cecchetti, Nicholas Legat and Olga Preobrajenska, and in 1923 she joined the Serge Diaghilev's Ballets Russes company (De Valois, 1977). De Valois founded The Royal Ballet School[71] in 1926, The Royal Ballet company[72] in 1931, and The Birmingham Royal Ballet in 1946 (De Valois, 1977). Apart from De Valois, Ashton, who was a dancer and chief choreographer (1935-1963) contributed to the development of the qualities of the RB dancers, says Lawson (1960). Choreologist and former member of the RB, Adrian Grater (1994:92) defines 'Ashton's step' consisting of '*posé en arabesque, coupé dessous,* low *petit developpé à la seconde, pas de bourrée dessous, pas de chat'*. This step was used by Marquez's and Sander's in their classes at DW (DW diary 08.03.2017; 19.11.2018). Ashton's choreographic style articulated head, shoulders, arms and hands, in lyrical and nuanced movements, describes Morris (2012). Elements from the RBS system of ballet training were used by teachers Roberta Marquez, Sander Bloomaert, Layla Harrison at DW, Louise

[70] As explains Morris (2012:72), De Valois' syllabus was 'not taught at the Royal Ballet School until the late 1940s' and it was 'the basis for the training at The Royal Ballet School between 1983 and 1999', and affected most of the dancers Ashton worked with throughout the 1950s, 1960s and 1970s.
[71] The Royal Ballet School disseminates a system of ballet training initiated by De Valois and developed under successive artistic directors (RBS, 2017).
[72] The Royal Ballet (hereafter referred to as RB) is based at the Royal Opera House - ROH in Covent Garden, London (ROH, 2017b). I included some details of the RB company in this thesis because my interviewees Marquez was a principal dancer at RB and teacher at DW, Chapman was first soloist with the RB and teacher at BB and RB, and Morris was a dancer at RB and is a dance scholar. These dancers and teachers transmit and share knowledge, values, and beliefs about the ballet technique and artistry between ballet institutions in different roles. Additionally, I observed one class with teacher Maloney and the RB dancers on-stage in 17.10.2019 and part of a class with teacher Evreinoff in 08.02.2018 at one of the studios at the Royal Opera House.

Bennett and Raimond Chai at DW and BB, Yohei Sasaki at ENB, and Deirdre Chapman at BB.

Cecchetti method

Enrico Cecchetti[73] (1850-1928) was an Italian dancer, mime, and pedagogue. Cecchetti's teacher Giovanni Lepri was a student of Blasis who, in 1820, codified the technique of classical ballet. During his time in London [1918-1923], Cecchetti established a ballet training system which was codified and recorded by Cyril Beaumont, Stanislas Idzikowski, Margaret Clarke and Derra de Moroda in a syllabus[74] (Grant, 1982 [1950]:29). The Cecchetti method, as this system is called, was of great influence on British Ballet (Guest and Bennett, 2007). In 1922 the Cecchetti Society was formed in London to pass on the tradition of ballet to future generations and in 1924 was incorporated into the Imperial Society of Teachers of Dancing –ISTD. Members of this Society 'must pass through a carefully graded system which has done much to raise the standard of dancing and teaching throughout the British Empire' (Grant, 1982 [1950]:29).

Cecchetti's method combined six sets of exercises with the classical terminology for each day of the week, according to Guest and Bennett (2007:17). His exercises begin alternatively one week to the left side, and the other to the right. The barre work is simple, brief and repetitive, while the later *enchaînements* such as *adage* and *pirouettes* in the centre are far more varied and choreographed with mime-like arm gestures to stimulate the development of artistry of the dancer (Guest and Bennet, 2007). This method focuses on technical elements, such as balance, elevations, *balloon*[75], strength, eight *port de bras*, *poise* – state of equilibrium between effort and ease, inclined head movements, and emphasis on *épaulements*. One of the pioneers of Royal Academy of Dance, the Russian dancer Tamara Karsavina explores the 'Italian school' developed through Cecchetti's classes. Cecchetti method is used in the BB and DW class when it is taught by Denzil Bailey.

The Royal Academy of Dance examination syllabus– RAD

The Royal Academy of Dance or RAD was established in London in 1920 as an independent English educational charity organisation with no government funding (RAD 2020). The RAD's patron is Her Majesty Queen Elizabeth II and their President is Dame Darcey Bussell, DBE (RAD, 2020). The RAD was founded with the name of Association of teachers of operatic dancing (AOD) by a group of people consisting of European ballet dancers and teachers, according to Bussell et al. (2019). The AOD was formed by Danish dancer Adeline Genée as president: J.S. Richardson of the *Dancing Time* magazine as secretary-treasurer, and a committee including British dancer Phyllis Bedells, Italian dancer Lucia Cormani, Russian dancer and ballet teacher Edouard Espinosa (trained by his father Leon Spinosa in French ballet style, who had as ballet teachers Jean Coralli, Filippo Taglioni, Jules Perrot at the Paris Opera, and Marius Petipa in the Mariinsky Ballet) and Russian dancer Tamara Karsavina, describes dance historian and critic Kathrine Sorley Walker (2007:202). The RAD is a system of ballet which offers examinations and certificates for ballet teachers and dance students. 'The initial elementary examination extended quickly to include the Intermediate and Advanced categories, all of which followed syllabi set out by Edouard, and he himself later travelled regularly abroad as an examiner', mentions Walker (2007:203).

[73] Cecchetti danced at La Scala de Milan and Mariinsky Theatre and modified some of the Italian ballet principles of his early training influenced by the time (1911-1928) he spent in Russia, according to dance researcher Melonie Buchanan Murray (2017) and ISTD (2014).
[74] Syllabus in ballet is a document detailing how the exercises should be executed in class.
[75] *Balloon* 'means a person's ability to retain in the air poses and positions' (after Akim Volinsky, 2008:149).

Karsavina (1885-1978) was of great importance to the RAD. Karsavina was educated at the Imperial Ballet School in St Petersburg and became a principal dancer with the Ballets Russes. In 1918 she moved to London and later helped the revival of her famous roles for the Rambert Ballet. Karsavina assisted with the establishment of The Royal Ballet and later created new choreographic roles for Frederick Ashton. For Karsavina technique and artistry blend and are developed in ballet class. Karsavina was a devotee of Cecchetti and explores his method in her writings (1961:104, 153, 232, 1962:33,64,67,90). Karsavina (1962:10) strongly recommends at the first exercises of the barre focus on the fluidity of movement and turnout which are to a great extent promoted by the *plié,* for instance, inclusion of 'two *demi-pliés* and two *grand-pliés* in each position'.

As writer Derek Parker (1995) describes, the RAD purpose is to 'improve the standard of classical ballet technique and to act as guardians of correct teaching standards, and to advance the art of the dance throughout Great Britain' (RAD, 1972 [1916]:ii). The RAD blends the British, French, Italian, Danish and Russian schools of dance teaching, and launched its first syllabus and exams in 1921 (Bussell et al., 2019). Most RAD combinations are set previously; this aspect creates the habit of dancers of practising memorised combinations.

Basic principles of the RAD examination syllabus are the acquisition of strength from slow progression, free of mannerisms or exaggeration. RAD nowadays uses choreographic concert music from performances in class, and sometimes the combinations mix parallel with *en dehors* positions, with some of them facing *en face*. The general theory is that dancers must spend enough time to achieve the maximum level of each technique as well as to master the steps (RAD, 2005). Some elements of the RAD style were seen in Sarah Daultry's classes at BB, for example, with emphasis on mixing parallel with *en dehors* positions in some of the sequences, with some of them facing *en face,* and focus on the execution of the *pliés*.

Balanchine style/technique[76]

George Balanchine (1904-1983) was a Russian dancer, choreographer and ballet master, as he called himself. Balanchine was trained at the Imperial Theatre School. From 1924 until 1929 Balanchine danced with the Diaghilev's Ballets Russes. Later Balanchine migrated to the United States and co-founded the School of American Ballet – SAB with arts patron Lincoln Kirstein in 1934, using particular Russian training tradition of the Imperial Ballet school. The elements of Balanchine's technical style were articulated from 1948 until 1983 when Balanchine[77] taught the daily company class at the NYCB (The George Balanchine Foundation, 2018).

The principles of Balanchine's technique classes include exploration of accents in musicality (complex phrasing and syncopation), exactitude in timing and athletic movement with extreme speed. For example, *developpés* or *grand pliés* may be done in one musical

[76] There is some disagreement regarding what I refer to as Balanchine's style/technique. This style relates to the qualities embodied by the dancers under Balanchine's teaching approach. Farrell (2002) and Balanchine himself objected to the assertion 'Balanchine technique', and so did his other collaborators, maintaining that he only reiterates his own background Imperial Russian Ballet training. In this view, there is no separate 'technique' in itself but rather a style (speed, tempi, a multitude of musical responses) applied on top of the ballet technique the students learn in the S.A.B. His former dancer, Suki Schorer (1999) argues that there is a Balanchine 'technique', which she teaches nowadays in the S.A.B. and outlines in her book *Suki Schorer on Balanchine Technique* (1999). It is important that 'Balanchine technique' as a term developed after Balanchine died.

[77] While dancers would come into the company trained often in SAB (especially in the late 1940s onward), then in the NYCB they would encounter a different type of class devised by Balanchine himself — this is the class recognised as Balanchine style [fast speed, many repetitions, not too much warm up, heels on the floor after jumps]. At the Balanchine's company class, the dancers prioritised the relationship between dance and music based on the instructions of the choreographer-teacher to develop their listening skills, as reported by his former dancers Suzanne Farrell (2002), Toni Bentley (1982), Suki Schorer (1999), Barbara Walczak and Una Kai (2008).

count, pirouettes *en dehors* with a straight back leg from the fourth position, fourth and fifth can serve as preparations for jumps and *pirouettes* involving deep *pliés* and exaggerated large distant positions (Farrell, 2002; Schorer, 1999). The movements of the dancer's legs in this style are over crossed in front and back when compared to other styles (e.g., *tendus, jetés, developpés, grand battements)*. Arms at *a la second* may be placed at the line side of the body and in *arabesque* can be placed over the line of the shoulders. There is an emphasis for dancers to travel through space as far as possible (Walczak; Kai, 2008). Balanchine's pointe and footwork emphasise the development of malleability of half pointe every time the foot stretches, keeping the dancer's focus on lifting their weight upwards and reducing the impact from bodyweight into the floor (Schorer, 1995).

Elements of Balanchine technique classes in my study were observed in class by teachers Damien Johnson at BB, Nina Thilas-Mohs at DW and BB, David Kierce and Rose Alice Larkings at DW. Johnson (interview, 06.04.2017) said he is inspired and teaches elements of Balanchine's class learnt from his own experience in the Dance Theatre of Harlem ballet company under Sir Arthur Mitchell's direction. It is important to state here that Sir Arthur Mitchell was a former company member with NYCB, Balanchine's company. Johnson (interview, 06.04.2017) explains that the 'different tempi' applied in class 'emphasises the dynamic' of the movement accents. In his classes, the dancers perform a slow *pirouette* or jump at first, and then a faster version of the same combination.

Vaganova method

Vaganova (1879-1951) was a Russian ballet dancer and teacher. In the twentieth century, Vaganova created a ballet training system with a syllabus. Vaganova (1969 [1946]) combined teaching methods from the old Imperial Ballet School (nowadays recognised as Vaganova Academy of Russian Ballet), with the romanticism of the traditional French ballet style, and the virtuosity and athleticism of the Cecchetti ballet style.

Vaganova did not believe in a rigid plan for the class, yet in the individualisation of the combinations created by each teacher based on their experience and sensibility. The Vaganova (1969 [1946]) method is characterised, for example, by the dancers' flexibility, harmony in form and placement of arms at the *port de bras*[78] coordinated with musicality. The method emphasises *épaulement,* prominence of the turnout, the foot leaves for *tendu* massaging the floor, movement of the arms is positioned to help the *balloon* of the jumps, and strength of the back. It prioritises *legato* [meaning performed in a smooth flowing manner]. Repetitions and choreographic work are emphasised at the centre. Most combinations are done in both directions *en dehors* and *en dedans* enabling the dancers to develop coordination. Thus, it is most associated with the Soviet technique. This style is very influential today as many Russian/Soviet teachers spread it around the world, explains Russian literature scholar Michael Meylac (2018).

Elements of Vaganova's method were taught in the classes of Dmitri Gruzdev at ENB and DW, Kristian Ratevossian at DW, and Irek Mukhamedov at ENB through the emphasis of the *balloon* on the jump exercises, the flexibility of the spine and development of extreme clarity of the line of movements and positions *en dehors*. For example, the men's classes at ENB sometimes are taught in Vaganova style (ENB Class 2) with a slow musical tempo guiding dancers to execute 'heavier' movements, such as work on deep *pliés* for jumps.

Cuban method

[78] *Port de bras* means in ballet terminology the movement of the arms in conjuncture with the accompaniment to the movement of the head, positioning of the eyes, placement of the shoulders, and use of breathing patterns, explains Vaganova (1969[1946]:44-46).

The Cuban method is characterised by an emphasis of control of the turns by using the arms and head to aid rotation. In this style, the female dancers turn thirty-two *fouettés* without hesitation, and the male suspends their rotation on demi-pointe on the *pirouettes*, then lower down into a *plié*. Every exercise ends with a position that is held for several seconds after the musical accompaniment ends to sustain a presentation quality.

Cuban ballet was founded in 1920 by Cuban dancer, teacher, choreographer and director Fernando Alonso (UNESCO, 2017). Ballet critic Célida Villalón (2012) explains that the Cuban's method drew from other ballet systems of training such as Vaganova, RAD, French and Cecchetti. Fernando Alonso first directed the school *Escuela de Ballet de Pro-Arte Musical.* Later, in 1950, he directed the *Academia de Ballet Alicia Alonso* in Havana Cuba. At the same year, Alicia Alonso and her husband Fernando Alonso created the company *Ballet Alicia Alonso*, which in 1955 was named as *Ballet Nacional de Cuba* – BNC [Cuban National Ballet] in 1948, according to dance writer Toba Singer (2013). Both Alicia Alonso and Fernando Alonso danced in Broadway musicals and at the American Ballet Theatre in New York. The dancers trained in Cuban's method are recognised by their use of dynamic, and expression of 'emotion' in class, for instance passionate, charismatic, aggressive and confident way of moving, explains historian Elizabeth Schwall (2016:227). For journalist and dancer Carrie Seidman (2016) the characteristics of Cuban ballet style transmitted in Alonso's company and school are sharp accents of the legs and speed of footwork radiating energy, intensity, *balloon*, and extreme flexibility. Cuban method was seen in the classes of Loipa Araújo at ENB where she emphasised the impetus, dynamic, and charismatic expression in the exercises in the centre, stimulating intricate variations in the dancer's coordination of movements with musical speed. Example of Cuban method used in class were extremely elevated leg extensions in *arabesque*, deep backbends on *relevé*, ¾ rather than half-pointe, and *passé* above knee height. Some of the ENB women's classes taught in Cuban method emphasised a fast-musical tempo guiding agile pointe work, such as the use of short *pliés* for *echappés* and *relevés*. Female dancers often attain and sustain immediate balance in *arabesque*.

Blending of ballet schools, methods and technique/styles in professional ballet classes in London

It is important to remember that many of the various aspects regarding the ballet systems discussed here were inspired by each other. The history of the ballet class and performance displays varied styles developed by renowned dancers, teachers and choreographers. Meylac (2018) points out that many dance professionals either migrated to different geographical places to develop their skills and abilities in a ballet technique, or they had contact with dancers from other traditions where they worked. The touring ballet companies influence the development of ballet technique and choreography in the places, in which they perform.

A dancer may be trained by various teachers across different styles in many training schools and that blended training would contribute to the dancer's combined embodied knowledge. For example, the dancer Margot Fonteyn could not do movements she had not absorbed previously in her body, thus, to learn Ashton's ballet style she needed to think about how to execute certain movements, explains Morris (2012) and Fonteyn (1989 [1975]). To some extent, the process of thinking is applied to other dance practices, such as performance. This aspect is discussed in the context of contemporary dancers' negotiations of 'a multitude of variables making rapid in-the-moment' decisions in performance (Roses-Thema, 2007: xi) but such issues are not considered in ballet scholarship.

List of abbreviations

ABT American Ballet Theatre
BB Ballet Black
BNC Ballet Nacional de Cuba
BRB Birmingham Royal Ballet
DW DanceWorks
ENB English National Ballet
ISTD Imperial Society of Teaching Dance
NBS Canada National Ballet School
NYCB New York City Ballet
POB Paris Opera Ballet
RAD Royal Academy of Dance
RB Royal Ballet
ROH Royal Opera House
RWB Royal Winnipeg Ballet
SAB Scholl of American Ballet
SB Scottish Ballet

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BB. Ballet Black company classes' field diary. Mixed-gender classes at Marylebone:
BB Class 1 (06.04.2017) 12 Lisson Grove, Marylebone Old Studio-Teacher Damien Johnson
BB Class 2 (13.04.2017) Teacher Damien Johnson * Participant
BB Class 3 (20.04.2017) Teacher Damien Johnson * Participant
BB Class 4 (5.04.2018) – New venue 12 Rossmore Road Feather's Community Centre Teacher Sarah Daultry
BB Class 5 (10.04.2018) Teacher Charlotte Broom
BB Class 6 (11.04.2018) Teacher Louise Bennett
BB Class 7 (12.04.2018) Teacher Deirdre Chapman

ENB. English National Ballet company classes' field diary:
-at Markova House
ENB Class 1: 14.06.2016 Women's class with Loipa Araújo
ENB Class 2: 21.11.2016 Men's class with Irek Mukhamedov
ENB Class 3: 10.04.2017 Women's class with Hua Fang Zhang
ENB Class 4: 25.04.2017 Women's class with Loipa Araújo
-at Coliseum Theatre
ENB Class 5: 16.12.2017 Mixed-gender class with Loipa Araújo
ENB Class 6: 20.01.2018 Mixed gender class with Dmitri Gruzdev
- at Sadler's Wells Theatre
ENB Class 7: 14.04.2018 Mixed-gender class Yokei Sasaki

RB. Royal Ballet company classes
RB Class 1: 8.02.2018 Mixed-gender Principals Class Olga Ebranoff at the Studio/ Backstage Tour
RB Class 2: 17.10.2019 Mixed-gender on-stage

ROH. Royal Opera House. Linbury Theatre Trio Concert Dance Post Performance Talk (Questions and answers) with dancers Alessandra Ferri and Herman Cornejo. 20.01.2019. 4-6.30pm.

DW. DanceWorks field diary classes at 16 Balderton St, Mayfair, London from 27.04.2016 until 15.08.2019. I attended as dancer *participant in total 155 (one hundred fifty-five) classes with different ballet teachers. These classes are differed on this chapter by date.

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